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*Ills, Skills and Frills**

IT IS A PRIVILEGE to be invited to this meeting and especially to meet with those of you who recently have entered the realm of scientific research. I know all of you are anxious to get on with your own reports, so you may be encouraged by the fact that these remarks are not accompanied by slides. Thus we can leave the lights on and give you a better chance to study your own notes while this talk is in progress.

Scientific and research meetings usually begin with general remarks that are intended to present something inspirational. Occasionally the material is stimulating, but more often it is so much hot air. It is a bit like the lady who called her local druggist after taking two pills that looked like vitamins. When she discovered they were plant growth stimulants, she feared they might be harmful, but the druggist reassured her. He said the pills were not really harmful although they were equivalent to about two shovels full of manure.

Research has been glamorized during the past twenty years. The tremendous advances which have been made in various fields plus dramatic news coverage of major scientific achievements have created an aura of romance around all types of scientific investigations.

In our own field of biology and medicine, there is a good deal of discussion about basic versus applied research and their relative merits. Actually the two cannot be separated. Nothing is more clinical than basic research that is done right, nor is anything more basic than clinical research that is managed wisely. There was a time when clinicians did the applied research, while those in the basic sciences conducted fundamental investigations. Now, however, the distinction is not so clear-cut. Clinicians have become interested in the basic aspects

of human biology, while basic science men sometimes work with patients where they see the value of their efforts in the service of humanity.

Basic research is defined as that kind of study which is done for its own sake. It springs from an innate desire, a fundamental interest that is not necessarily related to a need to discover something profound or useful. It may be compared to the man who wants to explore a cave just to see what is in it. He would be surprised to find hidden treasure or a vein of gold; he has no utilitarian motive beyond satisfying his own curiosity. The same principle holds for the man who climbs a mountain simply because he is intrigued by the problem and the challenge it presents. Working toward the summit (and the solution) gives him a sense of exhilaration and accomplishment. The mountain climber, however, may not find a challenge in exploring caves, nor is the cave man sure to be interested in mountain climbing.

Exploring in the realm of basic science is like finding a library filled with thousands of unread volumes. If the language can be deciphered, it is only a short time until all the volumes are read simply because people want to find out what is in them.

Basic research provides a background and furnishes the fundamental information that eventually may be applied for the benefit of mankind. Practically all major scientific advancements have been preceded by a great deal of basic research, yet many years sometimes elapse before the facts are applied to useful ends. You may have heard the story about Sir Michael Faraday who was demonstrating magnetism to a group. After he finished, one man asked, "This is all very interesting but of what use is it?" Sir Michael answered, "Could you tell me of what use is a newborn babe?"

Domagk received the Nobel Prize in 1939 for his work involving the antibacterial action of sulfonamides. Sulfanilamide however

in his research

*Presented at the Fourth Annual Student Research Forum at the University of Texas Medical Center, Galveston, Texas.

had been synthesized in 1908, and even this was preceded by many years of chemical investigation. During the second and third decades of this century, sulfonamides were used in the dye industry after it was found that they had an affinity for certain proteins. This led to the discovery of a similar affinity of sulfonamides for certain bacterial proteins, its subsequent application to bacterial infections in animals and finally its use in human beings.

Sir Alexander Fleming made a monumental contribution with penicillin, although he was the first to point out that its antibacterial action had been reported at least five times previously, the first time in 1888. In spite of Sir Alexander's work, further consideration of penicillin's possible value in infections was discarded by "higher ups" who controlled the money needed to finance additional investigation. Finally, about ten years after Sir Alexander's initial work, when another World War seemed imminent, it was decided to support further study of penicillin.

Some years ago I spent a summer at Friday Harbor, the Marine Station of the University of Washington in Puget Sound. There were scientists from all over the world who were interested in the life cycles and habits of small and apparently insignificant marine animal and plant forms, as well as other aspects of marine life. These people were called the "odd-ball bug chasers" by local town folk because their work seemed to have no practical value. However, the data they gathered later proved to be worth millions to the fishing and shipping industries.

You are here today because you are connected with a medical center and because you have shown an aptitude, an interest in research, which is commendable. The two-fold purpose of a medical school is to train competent physicians to treat the sick and to promote medical progress through research. These two aspects must remain in balance, however, because if one phase predominates over the other the primary humanitarian mission of medicine will suffer. You are interested in the future of medicine as a whole as well as your own individual

futures. Therefore, you should give serious consideration to this essential balance in medical sciences.

The past decade or more has been dubbed the era of "grantism" in research. The end of this era is not in sight, but already the particular kind of financial support which has permitted such great contributions to medicine is showing signs of disturbing the essential balance between medical research, teaching and medical care.

We can illustrate this point with the hypothetical story of a brilliant young scientist who might have participated in a Student Research Forum such as this. After deciding to go into academic medicine, he secures a job in a university medical school as an instructor. Fortunately his research interest yields a number of worthwhile publications and sizeable grants during the next few years and his accomplishments are duly recognized. He is promoted in his school and is invited to join several national professional organizations. With these advancements he assumes more outside activities and responsibilities. He and his wife build an attractive, rather expensive home in "Woodville Heights" and new friends with increased social obligations result.

Our hero is popular and becomes active in the affairs and politics of various national scientific organizations. He is elected an officer of one, is on the Membership Committee of another, on the Council of another and may even accept a place on the Editorial Board of still another group. He expects these appointments to be easy but to his dismay he finds that many hours of his time are consumed by telephone calls, meetings and countless administrative minutiae. In addition, since he has been promoted, he becomes a more prominent member of his institution so he is appointed to the Admissions Board, the Curriculum Committee, the Library Committee and sundry other "important" groups.

Although he did very well with his initial grants, it now becomes apparent that even more time and effort are needed to keep the grants coming. In fact, his academic promotions and professional standing depend on a continuation of these grants and on how many papers he publishes.

He soon discovers that some smart boys

have a method. They develop a kind of personal public relations set-up for themselves. They meet the right people, appear at the right places at the right time and arrange to get themselves appointed to committees or Study Sections at the National Institute of Health, National Science Foundation and other fund-granting agencies.

Our ambitious scientist remains fair, honest and conscientious, but the pressure from grant obligations, both current and anticipated, is manifest in countless subtle ways. The bigger the grant received by an individual the better everyone likes it. The added personal prestige is significant and likewise his parent institution unmistakably approves because the larger the grant, the more money the institution itself receives.

Then he discovers that while he has been successful in obtaining more grant money he has become so busy with other activities that he has only limited time for research, so he adopts a plan pioneered by others. He hires some recently-graduated young men who have not had time to establish themselves. He pays them well with the grant money, and if he is lucky he may be able to establish an Institute or similar "empire" where he is the Director. Now he can hire his own chemist, physiologist, microbiologist or pathologist and his group becomes an independent unit which may influence or use the parent institution as the occasion requires. These young hired men do the actual research and furnish the material for papers which in turn permits our hero to obtain more grants. His subordinates are not always interested in the Director's line of research (it may be difficult to change the mountain climber into a cave explorer) and the "Chief" is so occupied with other things that the quality of research suffers.

In the midst of all this, our hypothetical scientist is expected to do some teaching now and then. In fact, one of the reasons that he chose academic medicine as a career was his genuine interest in imparting his own knowledge to the younger generation. He knew that teaching would not bring tangible rewards nor wide recognition, but the opportunity to perpetuate the essence of medical science in the minds of his successors seemed payment enough. He saw a way toward being a guide as well as a scientific

explorer; a shepherd as well as a medical adventurer. Unfortunately his time for teaching dwindled away just as his time for work in the laboratory disappeared. His students-on-paper knew that he existed from his name on the door of an office and the flood of papers he wrote but they rarely saw him.

This story may be considered cynical but that is not how it is intended. It summarizes my observations over a number of years while I was involved in medical research, teaching and administration, and later in a position where it was necessary for me to visit nearly every medical center in the country. I am happy to say that the University of Texas Medical Branch is one of the few institutions in the country which does not appoint men on grant money to full time faculty positions. Most medical institutions welcome an increase in grant money because of the "overhead" for the institution, not to mention certain auxiliary benefits including more equipment, supplies and a greater number of personnel on the faculty. Likewise these grants add to the "total research effort" of the Institution which permits applications to other Federal agencies for new buildings for more research and additional space.

Where will this trend lead us? Fifteen or twenty years ago the annual outside grants from the National Institute of Health amounted to several hundred thousand dollars; now they have grown to hundreds of millions of dollars per year. Some institutions receive over 80 per cent of their support from Federal funds. Is this desirable? It certainly does not seem illogical to assume that whoever controls the purse strings controls the policy. No one knows the exact motive behind this golden stream of Federal grant money, but we should keep in mind the old adage: "Be wary of the gravy train."

Perhaps it is like the traveler in the mountains who said, "Howdy," to a native with a shot gun under one arm and a jug in the other. The native returned a friendly greeting and extended his jug. "Here, have a drink," he said. "But I don't want a drink," answered the traveler. The native replied, "In this country when we offer a man a drink it's an insult not to take it." With that he leveled his shotgun at him and said,

"Now drink!" There was nothing for the traveler to do but drink, so he did. The traveler gasped, "This is the foulest stuff I've ever tasted." To this the native replied, "Isn't it though? Now you hold the gun on me while I take a snort!"

Academic medicine, like most things in life, has its good and bad sides, its desirable and undesirable qualities. It is not a bed of roses. Young men interested in this field should enter it with their eyes open. They should understand the relation of medical research to teaching and also how these two activities must fit into the framework of medical science. They should not be led astray by the term "academic medicine." Remember that nothing is more academic than the practicing physician who sees a research problem in each patient even though he does not have unlimited time, technical help, elaborate equipment or electronic gadgets to supply certain types of data commonly used in scientific publications.

Fashions and trends are subject to change. The truth of this is born out by the changing attitude toward research support which has been emphasized recently in scientific as well as popular publications. If a man goes into research and "academic medicine" simply because he thinks it will advance his personal program he would do well to go elsewhere. Good research does not necessarily result merely because financial support is available for what someone else thinks is an "exciting" project. He must keep his feet on the ground and beware of many distracting factors, no matter how attractive they seem or he will end up as another "statistical" four to eight year research casualty.

The reasons why a promising young man's fruitful research life is usually so brief have been considered by others. One of the best of these explanations is called "Who Killed Cock Robin?" by Doctor Carl Dragstedt, Professor of Pharmacology at Northwestern University School of Medicine.¹ Doctor Dragstedt did a magnificent job of emphasizing the various distracting factors which were often innocent and well meant, but which finally destroyed the investigative spirit of Cockrell Robinson the research scientist. He concluded with a poem beginning

with the original stanzas from Mother Goose as an introduction and ending with his own modifications:

Who killed Cock Robin?

"I," said the sparrow

"With my bow and arrow
I killed Cock Robin."

Who'll make his shroud?

"I," said the beetle,

"With my thread and needle,
I'll make his shroud."

Who'll sing a psalm?

"I," said the thrush,

"As I sit in the bush,
I'll sing a psalm."

Who'll toll the bell?

"I," said the bull,

"Because I can pull,
I'll toll the bell."

All the birds of the air

Fell sighing and sobbing

When they heard the bell toll

For poor Cock Robin.

And now Doctor Dragstedt's pertinent modifications:

Who killed Cock Robin?

"Not I," said his wife,

"You can betcha your life,

I meant to encourage his labors,

I resent your suspicions,

I just had ambitions

That we could keep up with the neighbors."

Who killed Cock Robin?

"Not we," said his students,

"That's one way we wouldn't

Transgress academical rules.

We're very particular

To stick to curricular

Ways of annoying the schools."

Who killed Cock Robin?

"Not we," said his fellows,

"We wouldn't let jealousy

Hamstring a comrade's researches.

We resent the suggestion

Implied by the question

And wonder why you thus besmirch us."

Who killed Cock Robin?

"Not I," said the Dean,

"I've a real thoughtful bean,

And Robin's a man I've had eyes on.

I didn't intend
His researches should end,
I was broadening his narrow horizon."

With your permission I am inserting the
next stanza of my own.

Who killed Cock Robin?
"Not I," said N.I.H.,
"We grant many millions
And at times we plan to do more.
We give it direct
To those we select
When often we know not what for."

And now to continue with Doctor Drag-
stedt's poem:

They all watched him die,
They all made his shroud
They all dug his grave
While they mourned out loud.

They all sang a psalm
They all tolled the bell,
But none would admit
That he lied like hell.

Everybody involved
Kept sighin' and sobbin'
But none would admit
Killing poor Cock Robin. □

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Arthur A. Hellbaum, Ph.D., M.D.

Annual Meeting Revised

AS A RESULT of recommendations of the Annual Meeting Study Committee made to the House of Delegates of the Oklahoma State Medical Association in May, 1963, and approved by the Delegates, the Annual Meeting, to be held May 1, 2, 3, 1964, will assume a somewhat different format.

The House of Delegates will meet Friday morning and Saturday morning (May 1-2), and the main Scientific Sessions will be held Friday and Saturday afternoons, with no events scheduled to interfere with the Scientific Program. For those not attending the House of Delegates there will be additional scientific programs, including conferences, on both Friday and Saturday mornings. Other events are scheduled for Sunday, May 3.

An attempt will be made this year to present a coordinated scientific program, review-

ing some of the recent advances in the basic sciences as they pertain to practical clinical application as well as to strictly clinical material. This type of program may be used in subsequent years with different subject material so that in the course of a few years' time a wide gamut of medical information can be presented.

Needless to say, it is hoped that attendance of the scientific portion of the meeting will be increased, as it is rather dismal to invite speakers for some of the meager turnouts which have been present at some past sessions.—R. R. Hannas, M.D. □

Important Meetings Set This Month For OSMA

TWO OF THE most important conferences in recent years will be sponsored by the Oklahoma State Medical Association on the weekend of January 25th and 26th at the Skirvin Hotel in Oklahoma City.

On Saturday, the Annual Conference of County Medical Society Officers is scheduled to begin at 9:30 a.m. and will conclude with a social hour and dinner. At 9:30 a.m., the following morning, the first OSMA Mental Health Conference gets underway.

All members of the OSMA and their wives are invited to participate in both events, but particular emphasis is being placed on obtaining 100 per cent registration from county medical society and auxiliary officers, as well as from the OSMA Board of Trustees.

A full program for the County Officers Conference is featured in an article beginning on page 33 of this Journal. Never has the OSMA assembled a more impressive array of speakers, and the subjects selected hit at the heart of vital issues confronting the profession.

Mental health, another issue of growing importance to physicians and the nation, will be given special emphasis during the next day's program. The complexities of the mental health problem and the proposals being advanced at all governmental levels for its solution necessitate a "meeting-of-the-minds"—such is the purpose of the OSMA Mental Health Conference.

Contact the OSMA Executive Office for registration forms. □



I think if any one were to list some of the most important problems and issues that face the profession, as well as the state and nation, most of the following would be included:

—Public and professional apathy.

- Lack of understanding of the issues involved.
- Legislation involving medical care, both local and national.
- Methods and means for securing better legislation.
- Welfare programs and their problems, State and National.
- Problems concerning the Medical School and the faculty.
- Professional responsibilities, and how to assume them.
- Mental health problems, their limitations and potentialities.
- Professional policies and responsibilities in the mental health field.
- Newer outlooks toward total patient care.

A program that brings discussions of each of these has been formulated for the coming Conference of County Medical Officers, and the first Mental Health Conference to be held January 25th and 26th. Doc-

tor Rex Kenyon, of the Council on Public Policy, Doctor Hayden Donahue, of the Council on Public Health, and Doctor George Guthrey, of the Committee on Mental Health, are to be congratulated and commended for their preparation of these fine programs. The best commendation that could be given them is a full house of attendance that should include all physicians, as well as the County officers.

These will not be the usual standard, stereotyped programs, but will present different view points. One of the highlights will undoubtedly be the address of the Honorable Durward Hall, M.D., Congressman from Missouri.

* * * * *

My observations during the first two-thirds of my term, convinces me more than ever, that it is not the magnitude of the problems that we need to fear, but the disregard that we give them. We are too concerned, first with our own personal problems, and secondly, with picayunish and inconsequential issues that entirely ignore the main issues. These small and minor disagreements serve only to cast smoke screens over the main issues and to divide our interests and thinking about the real issues. We are still more concerned about the handle of the spade than we are about the spade itself and the hole that it digs!

Joe L. Quigg, M.D.

Acute Streptococcal Pharyngitis*

BARBARA BRADEN, M.D.
JOHN P. COLMORE, M.D.

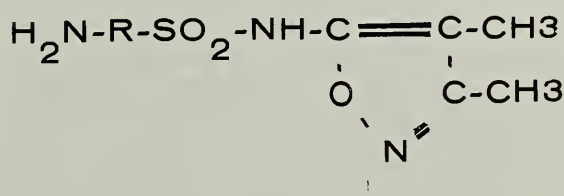
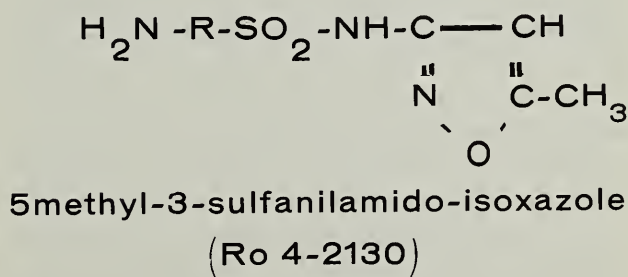
The data presented provide evidence that a new long-acting sulfonamide, in contrast to other sulfonamides, is effective in eradicating beta-hemolytic streptococci from the oropharynx.

which has been studied by us and the results discussed in a recent publication.¹ In this previous study, the effectiveness of 5-methyl-3-sulfanil-amido-isoxazole (RO 4-2130*) in eradicating the streptococci from the oropharynx was evaluated (figure 1) and a 94 per cent post-therapy bacteriological conversion rate was achieved.

The purpose of the present study is to compare the effectiveness of penicillin and of RO 4-2130 in eradicating streptococci from the oropharynx of patients with acute beta-hemolytic streptococcal pharyngitis.

PREVIOUS STUDIES by others^{2, 4, 6, 10, 11} have indicated that sulfonamides used in the treatment of acute streptococcal pharyngitis, although reducing the incidence of suppurative complications, failed to eradicate the streptococci from the oropharynx in a significant percentage of patients. It has also been shown that the non-suppurative complications of streptococcal infections, rheumatic fever and acute glomerulonephritis, are not prevented unless the organism is eradicated.⁴ Therefore, it has been recommended that sulfonamides not be used in the treatment of acute streptococcal infections.^{4, 7, 11, 12}

In more recent years, new "long-acting" sulfonamides have been developed, one of



SULFISOXAZOLE

FIGURE 1

*Supplied by Hoffman-LaRoche as Gantanol.

*From the Departments of Preventive Medicine and Public Health and of Medicine, University of Oklahoma Medical Center.

MATERIALS AND METHODS

The subjects of this study are 93 consecutive patients who received 107 courses of treatment for bacteriologically proven beta-hemolytic streptococcal pharyngitis. All patients were seen at the University of Oklahoma Medical Center Health Service between October, 1960 and April, 1961. They included 29 males and 64 females, ranging in age from 18 to 56 years with 74 per cent between 18 and 30 years of age. (table 1) All were seen for symptoms of acute pharyngitis and none required hospitalization.

All cultures of the throat were taken by means of sterile cotton-tipped swabs which were rubbed over the posterior pharyngeal wall and the tonsils or tonsillar fossae. The inocula were cultured on blood agar medium. The organisms were identified by gross examination of the culture for beta-hemolyzing colonies and by staining by Gram's method. Grouping and typing of the beta-hemolytic streptococci were not available. Random selection was achieved by arranging that patients whose hospital chart numbers ended in an odd digit were placed on penicillin, whereas those ending in an even digit were given the sulfonamide. If the patient had a history of known sensitivity to the agent thus selected, an exception was made and the alternative treatment given.

All patients received the same dosage schedule of the drugs: in the case of RO 4-2130, two grams initially followed by one gram every 12 hours for a total of ten days; or alternately procaine penicillin, 600,000 units intramuscularly daily for four days followed by long-acting bicillin, 1,200,000 units intramuscularly on the fifth day. Treatment was begun in most cases on the third day after the onset of symptoms (range one-seven days). Repeat cultures of the

AGE DISTRIBUTION OF PATIENTS	
AGE IN YEARS	NUMBER OF PATIENTS
UNDER 20	7
20-30	62
31-40	12
41-50	7
51-60	5
Over 60	0
TOTAL	93

TABLE 1

107 COURSES OF TREATMENT			
RO 4-2130 (58)		PENICILLIN (49)	
51 "CURES"		39 "CURES"	
Original Treatment	49	Original Treatment	33
Following Penicillin		Following RO 4-2130	
Failures	2	Failures	6
7 FAILURES		10 FAILURES	
Original Treatment	7	Original Treatment	10
Following Penicillin		Following RO 4-2130	
Failures	0	Failures	0
% "CURED" OR		% "CURED" OR	
BACTERIOLOGIC		BACTERIOLOGIC	
CONVERSION RATE		CONVERSION RATE	
88%		80%	

TABLE 2

throat were made five days after completion of therapy and then at weekly intervals up to 12 weeks after therapy. Pre-therapy and post-therapy urinalyses were performed in all patients, and pre-therapy and post-therapy peripheral blood studies were performed in all patients on the sulfonamide.

RESULTS

A patient was considered to have a "cure" only if the post-therapy cultures remained negative for beta-hemolytic streptococci for the first six weeks. Thereafter, a positive culture was considered a re-infection rather than a treatment failure. Of the 107 courses of treatment in 93 patients, there were 51 "cures" with RO 4-2130 and seven treatment failures, a bacteriologic conversion rate of 88 per cent. There were 39 "cures" with penicillin and ten treatment failures, a bacteriologic conversion rate of 80 per cent. (table 2) Of the seven treatment failures with RO 4-2130, six were subsequently treated with penicillin and considered "cures" with penicillin, while the remaining patient was lost to follow-up study. Of the ten treatment failures with penicillin, two were treated with RO 4-2130 and considered "cures" with this agent, five were lost to follow-up study and three were treated with erythromycin because of known sensitivity to sulfonamides (of these three latter subjects, one was cured and two remained treatment failures). All treatment failures using either agent responded favorably if treated with the other study drug.

One patient, who initially responded to RO 4-2130, became "re-infected" and responded to penicillin, then became "re-infected" again and responded to a second course of

TABLE 3
BACTERIOLOGIC CONVERSION RATE

Agent	Conversion
UNTREATED CONTROLS ^{2, 4, 6, 10, 11}	5-48
SULFADIAZINE ^{2, 4, 6, 11}	5-40
SULFISOXAZOLE ¹⁰	22
TETRACYCLINES ^{3, 5, 8}	55-76
ERYTHROMYCIN ^{9, 13}	48-95
PENICILLIN ^{2, 4, 9, 10, 13}	82-99
RO 4-2130 ₁	88-94

RO 4-2130. A second patient was initially "cured" with RO 4-2130, became "re-infected" after 12 weeks, and was again treated successfully with RO 4-2130. Three patients who were initially "cured" with RO 4-2130 subsequently became "re-infected," while two patients who were "cured" with penicillin became "re-infected," suggesting that the initial drug employed had no effect on the frequency of, or possibility of, re-infection in the patient.

Both penicillin and RO 4-2130 were well tolerated by the patients. Only one of 38 patients treated with penicillin and three of 55 patients treated with RO 4-2130 gave evidence of unfavorable reaction. The patient treated with penicillin had localized urticaria of the finger, under a ring, after the third intramuscular injection of procaine penicillin. One patient treated with RO 4-2130 developed mild weakness after eight days, of therapy; one noted hypersensitivity of the tongue after one day of therapy without observable physical change of the tongue; and one developed nausea, vomiting, diarrhea and abdominal cramping after six days of therapy, which was felt to have been a viral gastroenteritis rather than a reaction to the drug. Therefore, all these "reactions" were questionable and probably not due to the drug, although all four voluntarily discontinued the agent. Urinalyses and peripheral blood studies failed to reveal any evidence of sulfonamide toxicity.

Twelve months following completion of the study, no known cases of rheumatic fever or of glomerulonephritis have occurred.

DISCUSSION

It has been shown by others^{2, 4, 6, 10, 11} that in from one to six days after termination of sulfonamide treatment for acute streptococcal pharyngitis, oropharyngeal cultures are positive for streptococci in 60 to 95 per cent

of the patients and in 52 to 95 per cent of the untreated controls, suggesting that the sulfonamide used did not eradicate the streptococci. This also indicates that if growth of the streptococci were inhibited during the active phase of treatment, there was a rapid and early regrowth of the organism when treatment was discontinued. Previous studies^{2, 4, 9, 10, 13} have also shown that after termination of penicillin treatment in acute streptococcal pharyngitis, oropharyngeal cultures are positive for streptococci in from one to 18 per cent of the patients. Our experience in this and previous studies¹ show that post-therapy oropharyngeal cultures were positive for streptococci in six to 12 per cent of patients using RO 4-2130 compared to 20 per cent with penicillin. Stated differently, the bacteriological conversion rates for these two agents in our hands were quite comparable, that is, 88 per cent showing sterile cultures after RO 4-2130 against 80 per cent after penicillin. As may be seen from table 3, the bacteriological conversion rate using RO 4-2130 compares favorably with those reported with the use of various other antimicrobial agents in the treatment of acute streptococcal pharyngitis.

The desired goal in the treatment of beta-hemolytic streptococcal pharyngitis is to eradicate the streptococci from the oropharynx and to prevent the late complications of streptococcal infections, rheumatic fever and acute glomerulonephritis. In previous studies, the sulfonamides used in the treatment of this acute infection did neither, they did not eradicate the organism nor did

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A graduate of Columbia University College of Physicians and Surgeons, John P. Colmore, M.D., limits his practice to his specialty, internal medicine. He is now Associate Professor of Medicine at the University of Oklahoma School of Medicine.

Doctor Colmore is a member of the American Association for Advancement of Science, the New York Academy of Science, the American Federation of Clinical Research, the Central Society of Clinical Investigation and the American Trudeau Society.

they prevent the non-suppurative complications of the streptococcal infections. The high percentage of bacteriological conversion with RO 4-2130 in our studies compared to that with other sulfonamides may in part be explained by the longer treatment period used here, that is ten days, in contrast to the usual five day treatment period quoted in most other studies. However, this alone is not a satisfactory explanation because if the growth of streptococci were merely inhibited, one would expect a greater number of failures or of relapses than was found in our experience. Therefore, this agent, under the conditions of this study, in contrast to the shorter acting sulfonamides, does indeed eradicate streptococci from the oropharynx.

RO 4-2130 appears to offer several advantages as an antimicrobial agent in the treatment of acute streptococcal pharyngitis. The cost of the drug is significantly lower than that of erythromycin, oral penicillin or the broad spectrum antibiotics. RO 4-2130 is well tolerated and since it needs to be taken only every 12 hours instead of four times daily, is much more likely to be taken faithfully by the ambulatory patient and hence will have a greater chance to achieve the desired result.

The effectiveness of a new long-acting sulfonamide, RO 4-2130 and of penicillin in eradicating streptococci from the oropharynx of 93 ambulatory patients with bacteriologically proven beta-hemolytic streptococcal pharyngitis was compared. The bacteriological cure rate was 88 per cent with RO 4-2130 and 80 per cent with penicillin. □

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POSTGRADUATE SYMPOSIA SCHEDULED

Postgraduate symposia devoted to the operative aspects of gynecology and obstetrics will be presented March 12 and 13 at the University of Oklahoma Medical Center.

The guest faculty will include: Reuben H. Adams, M.D., associate professor of obstetrics and gynecology, Southwestern Medical School of the University of Texas; Raphael B. Durfee, M.D., associate professor of obstetrics and gynecology, University of Oregon School of Medicine; Isadore Dyer, M.D., professor of obstetrics, Tulane University School of Medicine; and John D. Thompson, M.D., professor and chairman of gynecology and obstetrics, Emory University School of Medicine.

The course was developed by the Oklahoma Medical Center's Department of Gynecology and Obstetrics and Department of Continuing Education.

Emphasis will be placed on the indications, contraindications and technics for operative procedure in a practical manner useful to the practicing physician.

The program will consist of lectures, round table discussions and informal small group seminars. Registration information and a program may be obtained from the Office of Postgraduate Education, University of Oklahoma Medical Center, 801 NE 13, Oklahoma City 4, Oklahoma. □

Crystallized Fear

ALFONSO PAREDES, M.D.

Relationships between functions of the thyroid gland and psychic events have been postulated but the psychogenesis and psychological management of hyperthyroidism remain a challenge to the clinician and the investigator.

IT HAS BEEN suggested that the facies of patients with hyperthyroidism is one of "crystallized fear." Characteristics of this condition are staring eyes, distressed expression and swollen neck. William Hogarth, the British painter, had some inkling about the relations between emotional shock and swelling of the neck. In one of his paintings he portrayed Sigismonda, the heroine of Boccaccio's story, "The Poisoned Heart," with an expression typical of a patient with toxic goiter. Sigismonda had just received a small box containing the heart of her murdered lover. Her father, who disapproved of the attentions paid by the young man, had him assassinated.¹⁹ The Romans believed that changes in size of the neck were related to certain aspects of human behavior. They measured the necks of young women with a string to determine defloration or pregnancy.³⁸

For some time, physicians have been interested in the influence of emotions on the functions of the thyroid gland. In reviewing ideas on this subject as presented in the scientific literature over the past forty years particular reference will be made to hyperthyroidism from the following points of view: (1) Nature of psychiatric symptoms in patients with hyperthyroidism; (2) etiopathogenic role of acute emotional stress; (3) patterns of psychologic conflict; (4)

personality types, and (5) psychotherapeutic management.

PSYCHIATRIC SYMPTOMS IN HYPERTHYROIDISM

A variety of psychologic symptoms have been reported in patients with this syndrome. Johnson observed: nervousness, irritability, indecision, doubts and fears, memory changes, insomnia, shortness of breath and palpitations. Occasionally his patients displayed acute manic behavior.³⁰ Conrad mentioned an increased intolerance to difficulties in the environment, hysterical symptoms, compulsions, paranoid ideas, manic-depressive tendencies and schizophrenic reactions.¹¹ Manic-depressive features often are emphasized in literature.^{15, 29}

Welti was impressed by an increased drive to work, a desire to do things uninterruptedly and occasional spells of confusion with time and place disorientation. Psychoses were characterized by hyperactivity and schizophrenic features, such as rambling conversation, vague persecutory ideas, suspiciousness, inappropriate laughter and hallucinations. Acute brain syndromes with characteristic sensorium deficit occurred with some frequency.^{16, 15, 20} Apathy, lethargy, a placid facies, depression and mental and physical inertia have been observed in the elderly.⁴⁷

Cossa classified patients with hyperthyroidism in: "petit nerveux" and severe psychiatric syndromes. In his series, the "petit nerveux" constituted approximately seventy-five per cent of his patients; they were individuals prone to react to minor stresses of everyday life with nervousness, overactivity, and instability. They suffered anxiety with or without agitation and had various psychoneurotic symptoms. The group with severe psychiatric syndromes had psychoses with delusional ideas and hallucinations.¹²

Although exophthalmos, enlarged neck and loss of weight have important implications

from the esthetic point of view, the psychologic impact of these changes in body image has not been studied in much detail.

It is now a well known fact that hyperthyroidism is usually accompanied by psychological symptoms. The patient is subjectively troubled and tense. His life proceeds at a fast rhythm. People in the environment appear to him whimsical and capricious and arouse in him intense feelings of a positive or negative nature.⁵

ETIOPATHOGENIAC ROLE OF ACUTE EMOTIONAL STRESS

Acute emotional stress has been implicated in the pathogenesis of hyperthyroidism. Maranon was one of the first to suggest that psychological events operate in subjects with a biologic disposition toward hyperthyroidism.⁴⁶

According to Bram 85 per cent of his patients presented a clear history of psychic trauma as a precipitating factor of the disease. He related some traumatic situations in which "the instinct of self-preservation was called upon to fight or flight: as in the firing line in battle, during a conflagration, an earthquake, shipwreck or train accident." Another form of acute psychic trauma was the emotional shock of minor surgical operations. Parturition in association with apprehension for self and offspring preceded four per cent of the cases in his series.

In accordance with the opinions of most of the earlier writers Hyman believed that in almost every case psychic factors were important.²⁷ Hyperthyroidism developed in a ship's fireman after a great fright resulting from the wrecking of his steamer, in persons after a Zeppelin raid during the First World War; in a school mistress after being chased by horses while riding a bicycle in a tunnel and in a woman after her hated husband returned from the front.¹⁹

Thyroid storm has been preceded by disruption of the main interpersonal relationships which supplied dependent need for affection in a woman.³⁵ Bercell⁴ mentioned three cases of thyrotoxicosis preceded by electro-shock therapy.

Studies such as Lidz'^{41, 42} reported psycho-

logic trauma in 90 per cent of the patients. According to the excellent work of Kleinschmidt, Waxenberg, and Sheldon,³⁴ 95 per cent of the patients gave evidence of traumatic events, chronologically related to thyrotoxicosis. These events were within the realm of usual life experiences. The absence of trauma of overwhelming magnitude in their series was striking. The meaning of the experience appeared to be of great importance to the patients. For example, a patient who had hostile fantasies against her husband and children whom she wished to abandon became quite panicky after a minor accident occurring while she was driving a car in which her children were riding. In contrast with most of the reports in literature, Mandelbrote and Wittkower⁴⁵ found that acute trauma preceded thyrotoxicosis in only two out of 25 cases.

Relatively little is known about the psychophysiologic mechanism through which emotional stress might operate as a factor in the development of this endocrinopathy. It is not easy to integrate physiologic data available with psychiatric data. Kracht³⁶ was able to induce adynamia tachycardia, tachypnea, tremor and exophthalmos in frightened wild rabbits. In his experiment he observed that the microscopic appearance of the thyroid gland was similar to the one induced after stimulation with thyroid stimulating hormone. Iodine uptake was also increased. Kracht cites his experiment as a model of thyrotropic stress-reaction elicited by psychologic stimuli.

Studies in human beings have failed to demonstrate an increased circulating level of thyroid stimulating hormone in all subjects with hyperthyroidism. Volpe, *et al.*,^{13, 58} in an experiment could not detect variations in thyroid function in subjects in whom anxiety had been induced. Alexander¹ used moving pictures to arouse strong affective reactions in patients with acute hyperthyroidism, treated patients and normal controls. He found a statistically significant increase of the protein bound iodine level in acute hyperthyroid patients.

The thyroid gland in thyrotoxicosis often fails to respond to an exogenous thyroid stimulating hormone.²³ It is interesting that hyperthyroidism has been reported in patients with hypopituitarism.^{17, 61} Harris and

Woods²⁵ stimulated the tuber cinereum in normal rabbits, causing a release of ACTH with no effect or depression of thyroid activity. On the other hand, adrenalectomized animals on constant maintenance doses of cortisone released thyroid stimulating hormone after the same type of electric stimulation. It is difficult therefore to clearly establish the cortico-diencephalopituitary-thyroid sequence of events in the pathogenesis of hyperthyroidism.

In order to interpret the findings of investigators, who suggest a casual relationship between acute emotional trauma and hyperthyroidism, we have to keep in mind that a diagnosis of hyperthyroidism may be reached with greater accuracy earlier, due to the availability of tests such as iodine uptake, protein bound iodine determination, etc. It is possible in many instances that the increased emotional reactivity associated with a high level of thyroid hormones might have caused the patients to exaggerate the emotional impact of their life experiences. Therefore, the sequence of trauma-hyperthyroidism observed in previous studies has to be revised.

There are some other considerations: emotional stress is an integral part of life; stressful situations have personal meanings. Effort and struggle constitute some of the healthiest and most gratifying human experiences. For many people the absence of stressful situations is in itself a rather traumatic experience.⁶²

PROLONGED EMOTIONAL CONFLICTS IN THE GENESIS OF HYPERTHYROIDISM

The importance of prolonged situational conflicts has been emphasized by several authors. They often elicited from women a childhood history of insecurity and broken homes. A tendency toward hyperthyroidism was common among the firstborn in families with domineering and cold mothers. In adulthood a high divorce rate and an above average rate of hospitalizations and operations was apparent. In males there was a predominance of patients with feminine identifications.⁵³

Conrad¹¹ detected two patterns in the life of these patients: a fear of losing shelter and affection, equivalent to the deprivation

of a mother or her approval and fear of the mother role. Ham, Carmichael, and Alexander²¹ described a specific dynamic pattern: frustration of dependent longings, persistent threats to security in early life and unsuccessful attempts to identify with the object of dependent cravings. Continued efforts toward premature self-sufficiency and taking care of others were common.

As a group, patients were successful rivals with siblings for parental affection. They "bound" mother to them by being passive, good children who took care of the parent, often sacrificing other wishes. They expected the same from their own children whom they attempted to dominate. When the dependency pattern was disrupted endocrine disturbances followed. According to Kaplan,³¹ they were sickly children who required more than the usual care and protection from their mother. Satisfaction of their emotional needs was interfered with by the birth of siblings. Solutions to the problems arising from early frustration of dependency were attempted through early maturation and self-sufficiency. The patient identified with his mother through a maternal wish for children. Disturbance in the relationship with a son played an important role in the illness.

Mandelbrote and Wittkower⁴⁵ found that patients expected from their mothers more love than they could get. They reacted to this frustration with aggressive death wishes which aroused anxiety and guilt. They became overdependent on the mother to ward off anxiety or developed premature strivings for self-sufficiency. When the efforts for dependency and self-sufficiency failed, thyrotoxicosis appeared.

According to the authors, thyroid disease could be interpreted as a symbolic expression of oral impregnation or introjection of

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an ambivalent regarded mother or mother's breast.

Lewis³⁵ believed that the illness is the result of a specific psychological situation in which a father attachment or fixation was converted or sublimated into father incest cravings. This conflict allegedly is expressed through the thyroid because "it is phylogenetically a uterus." The tumescence of the thyroid represents a father impregnation fantasy.

These formulations are interesting because they approach the patient's life events in a longitudinal fashion in order to detect patterns of psychologic conflict and defense mechanisms developing throughout the life of the individual, rather than as sudden crisis with physiologic concomitances. The value of such formulations is limited by the fact that it is difficult to determine their reliability. Most of the studies fail to provide adequate controls for comparison. Only a few studies attempted to match the patients studied with non-thyrotoxic patients. We do not know to what extent patients reported represent the hyperthyroid population. Only one paper tried to clarify this point by stating that "patients were selected in such a manner as to constitute a fair representation of several thousand patients followed in the clinic."⁵³ Even in this study, the specifics of the selection of patients were not given. All of these comments do not detract from the description of life patterns observed as guides for the psychologic investigation of these subjects.

PERSONALITY CHARACTERISTICS

Many authors found certain typical personality characteristics common to persons with hyperthyroidism. According to Welti⁵⁹ all these patients have an "air de famille." Outstanding features were strong feelings of insecurity, a keen sense of responsibility and a tendency to suffer in silence.¹⁰ For Lorand³⁸ they were emotional people, extremely sensitive to their environment and prolific daydreamers, many of whom possessed an artistic temperament.

Ruesch's patients were passive individuals, intensely dependent on authority,

with a superficial need for recognition, success and conformity. Many of them were foreign born. Kleinschmidt's patients were also passive, dependent individuals, who found it difficult to mobilize sufficient energy to attain modest goals.

The ones with higher strivings were immature and had unrealistic attitudes toward their roles as wives and mothers. Personalities, ranging from "stolid temperament to sensitive type," were observed by Rhinbold.⁵¹ A tendency to marry late (due to conflicts over leaving mother) maladaptation to sex, dyspareunia, frigidity and indifference to sex were common.

According to Robbins and Vinson,^{51,57} the performance of thyrotoxic patients tested with the "Maudsley Medical Questionnaire," "Crown Word Connection List" and "Color Naming Stress Test" was significantly different among normal controls, patients with somatization and patients with obsessive compulsive reactions.

PSYCHOTHERAPEUTIC MANAGEMENT

Certain techniques have been advocated in the handling of these patients. Bram⁸ recommended that the physician should "lead on with smiles and a friendly attitude and suggestive influence until surgery can be used. The doctor should make the patient feel he has a true friend. Friends and relatives should also be treated with psychotherapy. Conviction, persuasion and suggestion are important, as well as music, reading, conversation, attendance at lectures and other forms of diversion." Above all "the patient must be taught to keep the corners of his mouth turned upward." Hyman²⁸ advised careful inquiry into the patient's routine, ambitions, and frustrations, pointing out the relationship between symptoms and psychic trauma. He believed that the disease was a consequence of civilization and the civilized. Mittelman⁴⁸ indicated that psychoanalytically oriented psychotherapy would make the patient's basal metabolic rate return to normal. Dugan¹⁴ reported a patient who became psychotic after he revealed emotionally charged material while being treated by psychotherapy and warned against unnecessary probing.

Lidz⁴³ emphasized the importance of

handling the nervous symptoms in cooperation with the internist. "Psychotherapy" he stated, "should consist of helping the patient to accept a basic attitude of emotional dependence."

Few psychiatrists^{34, 52, 53} mentioned alterations in symptoms and personality after the patient's thyroid activity returns to normal as a result of surgical or medical treatment. Apparently the irritability and hyperactivity decrease and psychoses usually disappear. It has been suggested that patients who are better integrated prior to the onset of the disease are the most likely to show psychologic improvement after treatment.

Psychotherapeutic management is an important issue because of the frequency of psychologic symptoms. The symptoms, in many cases, are not completely relieved by medical or surgical treatment alone. It is possible that brief psychotherapy is indicated in most cases.

SUMMARY

The literature on the psychological aspects of hyperthyroidism was reviewed, with a summary of the ideas regarding the nature of psychiatric symptoms, the etiopathogenic role of acute emotional stress, psychologic patterns of conflict, personality characteristics and psychotherapeutic management. □

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Cardiac Arrhythmia Associated With Preoperative Medication*

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*Cardiac arrhythmias can be a
challenge to the anesthetist and
likewise the surgeon.*

THIS CASE IS presented because of an unusual disturbance in cardiac rhythm incident to the administration of preanesthetic medications. Twice in this case surgery was postponed because of the development of auricular flutter and fibrillation following atropine and meperidine administration, then as a trial these agents were administered and auricular fibrillation and flutter again developed. Subsequently, scopolamine was substituted for atropine and the surgery was carried out without incident.

CASE HISTORY

T.S.M., a white man, 76-years-old, entered the VA Hospital, Muskogee, Oklahoma on September 11, 1962 complaining of abdominal pain and rectal bleeding. During the preceding six months the patient was anorectic, had lost weight and had recurrent abdominal pain, at times associated with rectal bleeding.

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Physical examination showed a well developed and well nourished white man. Heart sounds were regular with a rate of 82. There was no evidence of cardiac enlargement, no murmurs were heard, blood pressure was 120/60. On rectal examination a large mass was felt on the left side.

Laboratory examinations. Hemogram was reported as follows: hematocrit 42 per cent; hemoglobin 13.1 g; white cell count 16,000 with differential showing neutrophils 71, lymphocytes 17, monocyte one, eosinophils four, and basophils one. Urinalysis was negative. Microflocculation test was non reactive. Chest x-ray was normal. The cardiovascular shadow was of normal size and configuration. Barium enema showed a large filling defect along the left lateral portion of the rectum and a stricture of the upper rectum or rectosigmoid junction about three cm. in length. It was the impression of the roentgenologist that there was a neoplasm of the rectum with annular constriction of the upper rectum or rectosigmoid junction. Electrocardiograph was read as within normal limits, the rate being 73. Anoscopic examination revealed large hemorrhoids. Proctoscopic examination showed an indurated mass at seven cms. Histological report of biopsy of the lesion showed adenocarcinoma, moderately well differentiated.

On September 21, 1962 a cystoscopic examination was done. The precystoscopic medication was meperidine 75 mg. and atropine gr. 1/100, given intramuscularly. There

is no indication that the patient developed rhythm disturbance before, during or after this procedure. Report of the cystoscopic examination, in part reads, "no signs of extrinsic pressure were noted." On October 10, 1962 the patient was prepared for an abdominoperineal resection. The preoperative medications were meperidine 75 mg., atropine gr. 1/200 given intramuscularly and pentobarbital sodium gr. 1½ orally. A Levine tube had been passed. Approximately one and one-half hours after the preanesthetic medication he was given Penthol and Anectine. He was intubated and administration of flurothane was begun. At this time the monitoring cardioscope indicated a disturbance in cardiac rhythm. There appeared to be auricular flutter with a rapid ventricular rate. Quinidine was given intravenously but this did not change the cardiac rhythm disturbance. The blood pressure was 70 systolic. The endotracheal tube was removed and the blood pressure rose but the cardiac dysrhythmia continued. The Levine tube was removed and the rhythm became regular. The operation was cancelled. An electrocardiogram taken in the recovery room one hour later showed the rate to be about 57 and the electrocardiogram was within normal limits.

On October 15, 1962 the electrocardiogram was interpreted as being within normal limits with a rate of 60. Surgery was again scheduled on October 16, 1962. The Levine tube was passed: the patient was given pentobarbital sodium gr. 1½ by mouth, meperidine 50 mg. and atropine gr. 1/100 intramuscularly. Within an hour the pulse was recorded as irregular. The electrocardiograph showed this irregularity to be auricular fibrillation and surgery was again cancelled.

In order to determine the cause of the cardiac irregularity it was decided to give each of the three drugs involved, *i.e.*, atropine, meperidine and pentobarbital sodium on successive days and note the reactions. On October 17, 1962, 1/150 gr. atropine was given intramuscularly. In one and one-half hours the electrocardiograph record was abnormal, showing auricular flutter. The electrocardiogram, prior to the administration of this medication, was recorded as normal. On October 18, 1962, electrocardiogram was

taken which was normal, meperidine 75 mg. was given. One and one-half hours thereafter an electrocardiogram was interpreted as auricular flutter. On October 19, 1962 electrocardiogram was recorded as normal. Pentobarbital sodium gr. 1½ was given orally. The electrocardiogram did not change.

It was decided to use Levo-Dromoran, two mg. in place of meperidine and scopolamine gr. 1/200 in place of atropine, intramuscularly. A trial was run with these drugs on the 29th of October, 1962 and they caused no rhythm disturbance. On October 30, 1962 Levo-Dromoran two mg. and scopolamine, gr. 1/200 were used as preoperative medication. The patient was taken to surgery and an abdomino-perineal resection was done for the carcinoma of the rectosigmoid junction. The surgery was performed using endotracheal anesthesia consisting of intravenous oxide, oxygen and ether supplementing Pentothol and Curare. The monitoring cardioscope showed the rhythm to be normal throughout surgery. An electrocardiogram after surgery was within normal limits. The patient made an uneventful recovery.

DISCUSSION

Atropine is well known to the medical profession. It is used in anesthesia primarily for diminishing the increased flow of secretions in the nasal, oral or respiratory tracts, which result from the irritant action of certain anesthetic agents,¹ producing relaxation of the smooth muscle of the trachea and bronchi,² and protecting the heart from reflexes that may be instituted through the vagus nerve, vago-vagal reflex and carotid reflex.

Atropine can accomplish such results through its action as a parasympathetic blocking agent.² Eager has pointed out that the basic mechanism of atropine appears to

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Arrhythmia / DORWART

be related to antagonism to actions of acetylcholine; such antagonistic effect takes place at synaptic junctions and nerve endings. On the heart, atropine is said to have three phases of action: an initial vagotonic effect, a vagal imbalance at different levels of the conduction system and a period of parasympathetic blockage.³ These cardiac actions in clinical doses are usually insignificant although there is considerable variation of atropine effectiveness, sinus tachycardia, A-V dissociation, A-V block and even ventricular extra-systoles occurring in normal, awake individuals. When atropine is combined with Neostigmine,^{2, 4} for instance, serious conduction defects and resultant arrhythmias may occur; while under Halothane anesthesia, ventricular arrhythmias can occur. The manufacturers of Halothane⁶ caution about the use of this anesthetic in patients with grossly disturbed cardiac rhythm such as auricular fibrillation, because the effect of Halothane on the myocardium remains to be evaluated, though evidence seems to suggest that Fluothane (Halothane) depresses the myocardium directly and does not have significant ganglionic blocking effects.

We believe that the cardiac irregularities of rhythm following administration of pre-anesthetic atropine were consequent upon

that drug. Scopolamine was substituted for atropine as the preanesthetic agent and a successful and uneventful operative procedure was at last carried out. Scopolamine, although chemically and pharmacologically similar to atropine, is less⁷ active as a vagal blocking agent, but the drying effects on the mucous membranes of the mouth and pharynx are more profound. The irregularities that appear in this case, auricular flutter and auricular fibrillation, are disturbing occurrences in themselves, and when they are present at the time of use of another anesthetic agent, they are more disturbing.

We judge that heart disease was present in the patient in question, inasmuch as while awake and not under the influence of medication, irregularities of rhythm were occasionally recorded, even auricular fibrillation and auricular flutter. ☐

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Oklahoma City, Oklahoma

The Management of Epistaxis*

DONALD R. RESLER, M.D.

This paper lists the etiologies of epistaxis, describes the management of simple anterior and more complicated posterior bleeding points and the complications of epistaxis.

THE PURPOSE of this paper is to outline the management of the patient with epistaxis and to discuss some of the complications encountered. Epistaxis is a symptom complex rather than a specific disease process. The main function of the nose is to warm and humidify the air. It is blessed with a rich vascular supply. In most cases epistaxis is a diagnostic and therapeutic problem of a simple nature, however each case must be individualized. There is occasional difficulty with both the diagnosis and treatment of these patients.

An attempt is made to exclude potentially serious but undiscovered disease processes which present with nasal bleeding as the first sign. The etiologic factors of epistaxis

can be divided into local and general as suggested by Hallberg⁶ and Gadre.⁴

Local:

1. Trauma: surgical, sneezing, digital, external trauma to the nose, nasogastric intubation, foreign body irritation.
2. Acute and chronic infection of the nose and paranasal sinuses.
3. Septal deviation.
4. Septal perforation of iatrogenic or pathologic origin such as syphilis and tuberculosis.
5. Neoplasms, benign and malignant lesions of the nose, paranasal sinuses, and nasopharynx.
6. Hereditary hemorrhagic telangiectasia.
7. Atrophic rhinitis.
8. Lethal midline granuloma.

General:

1. Hypertension and arterial vascular changes.
2. High venous tension seen in emphysema, whooping cough, bronchitis, and tumors of the neck and mediastinum.
3. Blood dyscrasias of leukemia, Christmas disease, aplastic anemia, purpura, multiple myeloma, scurvy, hemophilia, polycythemia, and prothrombin deficiency.
4. Cardiac disease, in particular, mitral stenosis.

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5. Rheumatic fever in childhood.
6. Early stages of acute generalized infection as with measles, smallpox, and typhoid.
7. Hormonal factors of pregnancy, vicarious menstruation, puberty.
8. Anticoagulant therapy.
9. Hepatic insufficiency.
10. Wegener's granulomatosis.

MANAGEMENT

The aim in management of the epistaxis patient is to control the bleeding, to replace significant blood loss with blood, and determine and treat the underlying cause. The patient must immediately be evaluated for shock. To control the hemorrhage a search is made to locate the bleeding point. The most common site of nasal bleeding is the anterior-inferior portion of the cartilaginous septum known as Little's area or Kiesselbach's plexus. Bleeding from this area accounts for 90 per cent of all epistaxis and fortunately this area is readily accessible. Kiesselbach's plexus comprises a plexus of terminal branches of the sphenopalatine, great palatine, superior labial and anterior ethmoidal arteries.

Another common site described by Woodruff¹⁶ is far posterior under the inferior turbinate. Bleeding from this area is associated with hypertension and arteriosclerosis, and probably occurs from dilated veins and associated arteries lying slightly deep to the veins. Other areas include the anterior tip of the middle turbinate and high on the septum near the roof of the nose from the anterior and posterior ethmoid arteries. Bleeding from these posterior areas is difficult to visualize and therefore difficult to control. Nasal vessels as emphasized by LaForce⁸ differ from most blood vessels. They lie in close proximity to bone and cartilage and are protected only by delicate mucous membranes. The septal vessels lie between the perichondrium or periosteum and the mucous membrane. Since the vessels are not supported by muscle or soft tissue, they have limited ability to contract to control bleeding. In older individuals with sclerotic vessels this inability to control bleeding spon-

taneously is exaggerated, and bleeding tends to be longer and usually intermittent.

EQUIPMENT AND EXAMINATION

To locate the bleeding point mentioned above, certain equipment is necessary and a routine must be established in the proper utilization of this equipment. A good light source must be available, preferably a gooseneck lamp without the reflector, containing a 100 watt light bulb. A headmirror, nasal speculum, bayonet nasal forceps and suction are necessary. Number ten or twelve French catheters are helpful for retraction of the palate and for insertion of a posterior nasal pack if necessary. Some form of cauterization should be available.

The patient is placed in a sitting position preferably. If fresh or clotted blood is within the nasal cavities, this blood must be removed with suction or forceps. Spraying the nasal cavity with 1/4 per cent neosynephrine may facilitate locating the bleeding point. If no bleeding is present during the examination, an attempt is made to stimulate bleeding by gently stroking the mucous membrane with a cotton swab. A history of intermittent bleeding is often characteristic of a posterior site. The anterior bleeding points are usually recognized without difficulty. It is quite important to examine the nasopharynx with mirror or nasopharyngoscope to rule out a lesion in the nasopharynx.

CAUTERIZATION AND PACKING

Once the bleeding site has been established the method of treatment depends upon the location and amount of hemorrhage. If the bleeding site can easily be seen as in Little's area, it is then cauterized with silver nitrate, electrocautery or chromic acid beads. Local anesthesia is obtained by placing a small cotton pack moistened with 0.5 per cent or one per cent tetracaine into the bleeding area. The purpose of cauterization is to coagulate the vessels without burning a large area of mucous membrane. Excessive cauterization may result in septal perforations, intranasal adhesions and atrophic scars. After bleeding has been controlled with cauterization it is wise to observe the patient for 20 to 30 minutes to be certain of hemostasis.

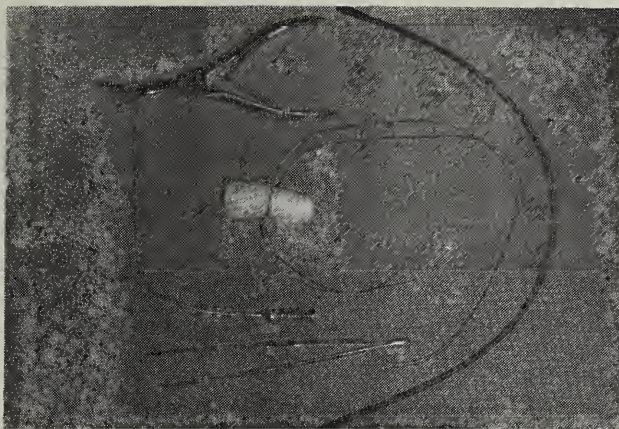


Figure 1. Bayonet forceps, nasal speculum, suction tip, posterior nasal pack, French rubber catheter.

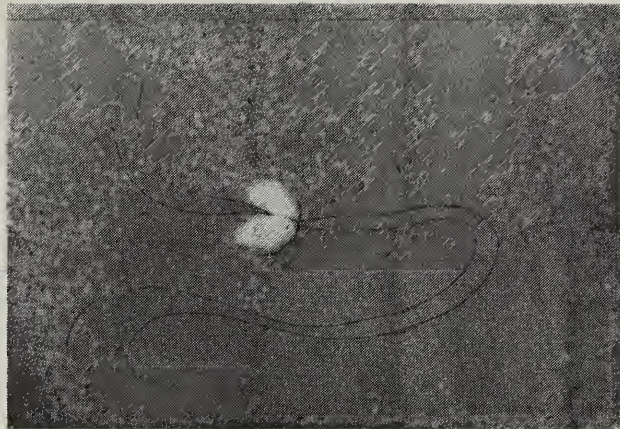


Figure 2. Posterior molded nasal pack.

If the anterior bleeding is not controlled with cauterization, a small anterior one-half inch vaseline gauze pack may be applied. If the bleeding point is seen and inaccessible to direct cauterization, packing is required. An example would be bleeding from behind a septal spur or from beneath the inferior turbinate. For the particularly apprehensive or agitated patient a mild sedative may be used prior to packing. Depending on the severity of the bleeding episode, the anterior packing is removed in 24 to 48 hours. The instruments needed to place an anterior pack are a bayonet forceps, and a nasal speculum (see figure 1).

If the bleeding point is located posterior and cannot be directly visualized, a posterior pack is required. The procedure for placement of these packs is quite important. The mucous membranes of the nose, nasopharynx and pharynx are anesthetized with topical tetracaine, as the procedure is extremely uncomfortable to the patient. The patient may require some sedation, and the steps of the procedure are explained to the patient.

The posterior nasal pack is made by folding lengthwise four by four cotton gauze squares and rolling them tightly. The size of the posterior pack may be varied by the number of gauze squares used. The appropriate size for the patient's nasopharynx is estimated. The gauze squares are bound tightly around the middle with two long #0 or heavier silk sutures. Silk is used because cotton will decompose in the nose within a short period of time. The two silk sutures are tied to the pack with the knots pointing in opposite directions. The two ends of one suture are cut short while the other two

ends are left long. The pack is moistened and molded to conform to the choana and nasopharynx (see figure 2). The small rubber catheter is passed through the nose into the pharynx. The catheter is grasped with forceps and brought out the mouth. The long ends of one black silk suture are tied to the catheter. The pack is then pulled into place by guiding it posteriorly to the soft palate with the index finger. Care is taken to avoid laceration of the soft palate with the suture. The pack must be large enough to occlude the choana, however not large enough to interfere with respiration or swallowing. The main purpose of the posterior nasal pack is to occlude the choana so that the nasal cavity can be packed tightly without prolapse of the packing into the pharynx. Pierce and Chasin¹³ suggest that a second rubber catheter be placed into the opposite nasal chamber and used to retract the soft palate anteriorly, thus facilitating the insertion of the posterior nasal pack. One-half inch vaseline gauze is packed into the involved nasal cavity firmly against the posterior pack starting posterior-inferiorly and working superiorly and anteriorly. Care is taken to produce firm pressure throughout the posterior nasal cavity and to leave no space for blood clots to form. A small gauze pack is placed at the nares and the long ends of the sutures passing through the nasal cavity are tied over this pack to maintain the position

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of the posterior pack. The suture hanging into the nasopharynx is checked for length and cut one-two cm. below the soft palate. The latter serves as a means of removal of the pack. The common practice of bringing this suture out the mouth and taping it to the cheek is annoying to the patient. The packing is left in place at least four days.

SUPPORTIVE CARE

All patients requiring a posterior nasal pack necessitate hospitalization on complete bed rest. Sedation is utilized depending upon the state of anxiety and discomfort of the patient. Phenobarbital one-half to one grain every six hours may be used. Demerol® and morphine sulfate not only relieve the pain of the pack but are helpful in reducing the blood pressure and allaying anxiety. A more direct pharmacologic attack upon the elevated blood pressure is of questionable wisdom. The pulse and blood pressure are followed closely. The patient is typed and crossmatched for whole blood. Daily hemoglobin and hematocrit determinations are made. The patient is placed on a diet of liquids and soft foods and a careful intake-output record is kept. Antibiotics are usually given prophylactically in the form of procaine penicillin, 600,000 units intramuscularly twice daily, and tetracycline, 250 mg. orally every six hours, in view of the concomitant secondary sinusitis and frequent secondary otitis media. The head of the bed is elevated 45 degrees to reduce the arterial and venous cephalic blood pressure. At regular intervals the patient's pharynx must be checked for active bleeding of which he may be unaware. It is very important to reassure both the patient and the family. However, it must be remembered that the mortality of epistaxis requiring hospital admission is four to five per cent. The application of cold or ice packs to the dorsum of the nose, forehead and neck may be of comfort to the patient. Limited ambulation after the second hospital day is encouraged if the bleeding is controlled to reduce the incidence of thrombophlebitis.

The use of a number of medications including estrogens, vitamins, calcium, adrenochrome salicylates and pituitrin have not

been helpful in our hands. Our experience is in contrast to the findings of Peele¹² with Carbazochrome, Menger⁹ and Gadre⁴ with estrogens, Neivert¹⁰ and Bennett¹ with ascorbic acid, and Gadre⁴ and LaForce⁸ with intravenous calcium. In the presence of Vitamin K deficiency evidenced by a prolonged prothrombin time, Vitamin K therapy is of course of the greatest importance. Its routine use however, is inappropriate.

When the patient continues to bleed in spite of repeated packings, one must consider interruption of the blood supply to the involved area. Comprehensive studies of the nasal blood supply have been made by Ogura and Senturia¹¹ and Batson.² Quinn¹⁴ pointed out that the morbidity of such a procedure is low, and the complications are few and rare in occurrence. Ligation of the primary arterial supply may be a life-saving measure. Bennett¹ suggested a method of selecting the vessel to ligate, which depends largely on locating the bleeding point. The middle turbinate is a landmark to establish the source of bleeding. Bleeding above it is likely to be from a branch of the internal carotid artery, while below it, the source is likely to be a branch of the external carotid artery. There is still considerable discussion and difference of opinion in the literature as to which vessel to ligate. Most authors^{1, 3, 5, 6} feel that either the external carotid artery or anterior ethmoid artery should be ligated. Ligation of the external carotid artery is performed under local anesthesia, with the incision being made at the anterior border of the sternocleidomastoid muscle. The artery is ligated distal to the lingual branch of the external carotid to eliminate flow from the opposite external carotid artery through anastomosis by the superior thyroid and lingual arteries. When bleeding is high in the roof of the nasal cavity, the anterior ethmoid artery is ligated with an incision parallel to the medial orbital rim. The orbital periosteum is elevated laterally and the vessel occluded by a silver clip.

In general it should be emphasized that lack of control of bleeding in the absence of a blood dyscrasia is due to inadequate packing. Repacking is the treatment of choice and will control the bleeding almost invariably.

Another surgical procedure may be indicated to stop a bleeding vessel lying behind a septal spur or septal deviation. An emergency submucous resection thus affords exposure of the site of hemorrhage and packing usually will control the bleeding.

MANAGEMENT OF SPECIFIC CAUSES OF EPISTAXIS

There are a few specific diseases which deserve special attention. Hereditary hemorrhagic telangiectasia is a rare condition carried by a dominant gene. The lesion is an arteriovenous fistula with telangiectasia occurring over the mucosa of the lip, tongue, palate, nasal septum and on the fingertip where red streaked telangiectasia under the nailbeds are pathognomonic. Spidery cutaneous lesions occur on the cheeks and ears, and usually do not bleed. Epistaxis is the most common symptom with the resulting anemia frequently incapacitating the patient. Saunders¹⁵ describes an ingenious surgical procedure with replacement of the septal and inferior turbinate mucosa by a split thickness skin graft. In managing blood dyscrasias try to avoid packing or cauterization. Supply the defective substances by transfusion of whole bank blood, plasma or fresh frozen plasma. If necessary to pack such a patient, oxidized cellulose in very small amounts causes less trauma and does not require removal. Corticosteroids have been used with a remission of hemorrhagic symptoms in idiopathic thrombocytopenic purpura, allergic purpura, and pseudo-hemophilia. Corticosteroids presumably aid hemostasis because of their effect in decreasing capillary fragility. A hemangioma involving the nasal septum should be excised if it produces significant difficulty.

COMPLETE MEDICAL EVALUATION

During the course of management of the epistaxis patient, the physician must take a complete history and search for possible etiological factors. A careful ear, nose and throat examination should be included in the complete physical examination. Complete blood count, including platelet estimate should be obtained along with a prothrombin time, tourniquet test, bleeding and coagula-

tion times, urinalysis, blood urea nitrogen, fasting blood sugar and bromsulphalein test. If indicated, liver function studies should be completed. Complete evaluation includes a chest and sinus x-ray.

COMPLICATIONS OF EPISTAXIS

As pointed out by Woolf and Jacobs,¹⁷ mortality from epistaxis undoubtedly has been seriously underestimated. The majority of deaths from epistaxis are not published. Shock from blood loss is frequent. Where there is a pre-existing hypertension and cardiac disease, hypotension and hypoxia of anemia of even moderate degree are life threatening. Prompt restoration of blood volume with whole blood is essential.

One of the principal fatal complications of epistaxis is hepatic coma in the patient with a previously damaged liver. Since the patient with severe epistaxis swallows large quantities of blood, they are subject to the same difficulties as the massive gastrointestinal bleeder. The absorption of ammonia produced by the decomposition of blood by bacteria in the gastrointestinal tract will lead to hepatic coma. In the presence of known liver insufficiency it is of paramount importance to eliminate blood from the gastrointestinal tract by catharsis and enemas and to inhibit the bacterial activity in the gastrointestinal tract by the use of oral neomycin as emphasized by Hicks.⁷

PREVENTION

Prevention of recurrence of epistaxis should be directed toward elimination of local trauma, treatment of nasal and paranasal sinus infection, control of hypertension and control of any underlying bleeding tendency.

SUMMARY

The multiple etiologies of epistaxis are listed. The management of relatively simple anterior bleeding points and the more difficult posterior bleeding points are outlined. The management of an underlying bleeding tendency is emphasized. The major complications of shock and hepatic coma are discussed. The mortality of epistaxis requiring hospital admission is generally underesti-

mated. The patient who has recently recovered from an episode of epistaxis should be given the most careful management in order to correct any underlying diseases.

* * *

I am greatly indebted to Doctor James B. Snow, Jr., for his advice and guidance in the preparation of this presentation. □

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editorial

Blue Shield for Oklahoma Doctors

During the past few weeks Oklahoma doctors have received a letter over the signature of N. D. Helland, stating that the Oklahoma Blue Shield Plan is now offering Blue Shield contracts to Oklahoma physicians. The letter is undated and sent with three enclosures describing the rate structure and details of benefits.

Inasmuch as the Oklahoma State Medical Association has gone on record at its annual meeting on at least two occasions in the past ten years as being opposed to Blue Shield contracts for its members, the prevailing opinion being that doctors render professional services without charge to other doctors and their dependents in this area, this change in policy for Blue Shield in Oklahoma is of interest. Most physicians are aware that in our State there is no official tie between the Oklahoma State Medical Association and the Blue Cross and Blue Shield plans. But the fact that OSMA members constitute a

good portion of the Blue Cross Board of Directors and constitute nine out of sixteen members of the Blue Shield Board, has made for very close liaison through the years.

In questioning Mr. Helland about this change in policy, he states that the Blue Shield Board voted at its annual meeting in April, 1963, to offer Blue Shield contracts to Oklahoma doctors and that the plan is now being put into effect. The following members of the Oklahoma State Medical Association serve on the Blue Shield Board of Directors: Floyd T. Bartheld, M.D., McAlester; John F. Burton, M.D., Oklahoma City; Joe L. Duer, M.D., Woodward; J. H. Foertsch, M.D., Chickasha; George H. Garrison, M.D., Oklahoma City; Bruce R. Hinson, M.D., Enid; Ralph A. McGill, M.D., Tulsa; Homer A. Ruprecht, M.D., Tulsa, and, Orange M. Welborn, M.D., Ada.—Walter E. Brown, M.D., Editor.

AMEBIASIS*

PATHOGENESIS AND EPIDEMIOLOGY

FREDERICK D. MANNERBERG, M.D.
JOHN B. DELASHAW, M.D.
EDWARD N. BRANDT, JR., M.D.

The manifestations of amebiasis are often protean and may closely mimic other gastrointestinal disorders. For these reasons, an attempt to increase the clinical awareness and diagnostic acumen is being promoted at the University of Oklahoma Medical Center.

THE FIRST RECOGNITION of amebae in the stool of man is thought to have been by Lewis in 1869.¹ It has further been stated² that the first publication of a case history and attempted experimental study was by Lösch in 1875. Osler, in 1890, described an hepatic abscess containing amebae.³ This was followed in 1891, by a monograph⁴ which was the first publication to present the modern concept of amebiasis as a definite entity and to include a description of the organism and of the pathological lesions in the colon. Since that time, numerous investigators have contributed to further knowledge of the organism and the disease in its many manifestations.

The purpose of this report is to review the pathogenesis of this disease and to present the improved diagnostic procedures which recently have been instituted at the University of Oklahoma Medical Center. Also an attempt to re-emphasize the presence of this disease in Oklahoma and to review current thinking about diagnosis and therapy are presented.

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The human is infected by ingestion of the *Entamoeba histolytica* cysts. This is followed by an incubation period of from one week to three months before symptoms occur. When the cysts are swallowed by a susceptible person they pass unaltered through the stomach and are then digested by the action of trypsin in the small intestine. Excystation usually takes place when the cysts reach the cecum. Each cyst yields an ameba with four nuclei which undergo binary fission to produce eight trophozoites.⁵ The amebae divide rapidly and form colonies as they invade the colonic mucosa both by direct mechanical penetration and by secretion of a proteolytic enzyme called cytotoxin which causes mucosal erosion. The increasing colony of amebae usually proceeds via a narrow channel down to the base of the mucosa where the lesion enlarges laterally as the ameba reach the resistant muscularis mucosae. The amebae may erode through the muscularis mucosa into the submucosa where they are able to spread out to produce the typical flask-shaped ulcer. They may then enter the mesenteric venules or lymphatics and be carried to extra-intestinal sites. The most common site of secondary infection is the liver in the form of a hepatitis or hepatic abscess. Cerebral, cutaneous, renal, pericardial, pulmonary, genital and gallbladder involvement have all been reported.⁶

The usual sequence in the life cycle is extrusion of the trophozoite into the intestinal lumen from the mucosal lesion. In the lumen it is transported to the colon where it encysts. In the presence of diarrhea the trophozoites may pass in the stool before encystation can take place.

The world wide distribution of amebiasis has been revealed by numerous surveys⁵ which show a variable incidence in different

parts of the world. Poor living standards and sanitary conditions are directly related to an increased incidence of this entity. The peak incidence occurs between the ages of 26 to 30 years. Males are more frequently infected than females and the disease is more prevalent in warmer climates.⁵

Transmission of the cysts from man occurs by fecal contamination of drinking water, vegetables and other foods by food handlers,⁷ other infected persons⁸ and the housefly.⁹ The asymptomatic human carrier of the infection is the main reservoir for transmission in man.⁵

The reported incidence in the general population of the United States varies from five to ten per cent⁵ while the incidence in Mexico is reported to be about 25 per cent.⁶ The number of cases of amebic dysentery reported to the Oklahoma State Health Department¹⁰ from 1951 to 1960 was 305. The geographic distribution of these cases is shown in figure 1. This is an average of approximately one case per six thousand population per year reported in Oklahoma compared to a possible five to ten per cent in the United States by other surveys.⁵ Part of this difference may be due to a lack of case reporting.

During 1961 and 1962 ten per cent of the Central State Griffin Memorial Hospital pop-

ulation was surveyed¹¹ by the Gastroenterology Section of the Department of Medicine of the University of Oklahoma Medical Center. Of the 159 patients surveyed, six per cent were found to be infected with *Entamoeba histolytica*. These people were all asymptomatic and live in an environment where one would expect the incidence to be much greater than the general population.

A review of the records of the University of Oklahoma Hospitals from 1947 to 1961 (table 1) discloses 31 cases of valid amebiasis diagnosed during this period. This is an average incidence of approximately one case per four thousand admissions per year which is not essentially different from that incidence reported to the State Health Department from the State as a whole. An attempt to improve diagnostic acumen is now being made in the Medical Center by teaching greater awareness and the use of improved diagnostic techniques.

DIAGNOSIS

The diagnosis of amebiasis is dependent upon the clinical suspicion of the disease. Classically the clinical picture of acute intestinal amebiasis is characterized by intermittent episodes of diarrhea, abdominal pain, weight loss, fever and occasional chills. A history of recurrent diarrhea should arouse suspicion of this disease; however, its

REPORTED CASES OF AMEBIC DYSENTERY IN OKLAHOMA FROM 1951 TO 1960

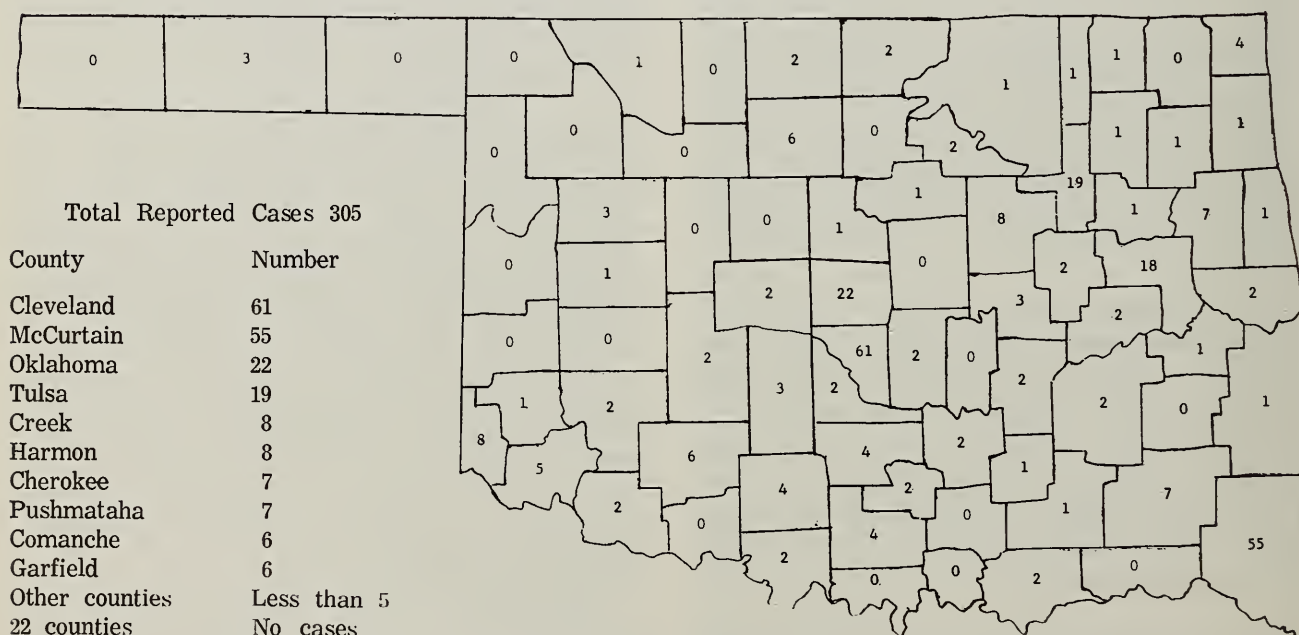


Figure 1. Geographic Distribution of Reported Cases of Amebiasis in Oklahoma

University Hospitals	1947 - 1961
Intestinal (discharge diagnosis)	36
Trophozoites in stool	26
Cysts in stool	2
Diagnosis not confirmed	4
Other protozoa in stool	4
Liver abscess	3

TABLE 1: Amebiasis

manifestations are so protean that it should be considered in any patient with hepatic or colonic symptoms with or without diarrhea. The stools are typically watery and frequently contain blood or mucous. They may occasionally be formed, and streaked with blood and mucous. The symptoms of amebiasis may closely mimic those of ulcerative colitis and many physicians believe that every patient with a diagnosis of idiopathic ulcerative colitis should receive a course of anti-amebic therapy. Amebomas have been mistaken for carcinomas with disastrous results from an operation performed without prior anti-amebic therapy.

The quiescent or carrier state of amebiasis is usually a completely asymptomatic one. Despite the absence of symptoms, the "healthy carrier" probably does not exist, for in all carriers minute superficial ulcerations of the colonic mucosa are continuously present.¹²

Once the physician has considered the possibility of amebiasis there are several procedures which are helpful in establishing the diagnosis, and these will be discussed in detail.

1. Sigmoidoscopy

Rectal lesions are not always present in amebiasis. Demonstrable ulcerations of the rectal mucosa occur in approximately 25 per cent of the patients with acute intestinal amebiasis. Early lesions are classically punctate, flask-shaped ulcers with a surrounding yellow or red halo and are found on otherwise normal mucosa. With progression of the disease, the ulcers may become extensive with irregular shaggy overhanging borders, resulting in little or no normal mucosa visible. In these circumstances the sigmoidoscopic picture more closely resembles ulcerative colitis than amebiasis. Rarely amebomas may be seen in the rectum, and these may be erroneously diagnosed as carcinoma. Perianal cutaneous lesions are rare,

but not unheard of, and they also closely resemble carcinomas.¹³ Regardless of the sigmoidoscopic appearance of the rectum one should always seek confirmation of the diagnosis by demonstration of the organism.

It should be emphasized that the most rewarding sigmoidoscopy is obtained without any preparation of the patient. Enemas may cause inflammation of the rectal mucosa, obscuring tiny ulcers and making it impossible to evaluate the sigmoidoscopic picture.¹⁴ Purgatives, or laxatives, have the same effect on the rectal mucosa and thereby compound the difficulty of the diagnosis of amebiasis by removing the mucous and necrotic tissue which contains the largest numbers of organisms. In the vast majority of patients with diarrhea the rectum is empty and can be examined at any time without preparation. The patient without diarrhea is best examined without any preparation following a normal bowel evacuation.

2. Demonstration of *Entameba histolytica*

The confirmation of the diagnosis of amebiasis is frequently difficult. This difficulty is compounded by improper collection and preparation of the material to be studied. Fresh specimens should be examined immediately since the trophozoites usually will remain motile for 15 to 20 minutes at room temperature if the preparation is protected from drying. Trophozoites are very fragile and may be rendered unrecognizable by the presence of urine or tap water and therefore care should be taken to collect material free of urine and diluted only with normal saline prior to examination. The administration of heavy metal compounds, antibiotics and chemotherapeutic agents may seriously interfere with the demonstration of trophozoites in secretions or stools for a period of seven to ten days. Therefore, material should be collected for examination prior to administration of heavy metal antidiarrheic medi-

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cations or x-ray procedures using barium sulfate. When it is necessary to examine purged stools, they should be contained by the use of laxatives such as phosphate of soda or epsom salts. Milk of Magnesia, laxatives containing senna, and oils should be avoided.

The *Entamoeba histolytica* trophozoite is shown in figure 2. There is variability in the size, but usually averages 20 to 35 microns. The granular hazy endoplasm, comprising about two-thirds of the trophozoite, is surrounded by a clear, refractile ectoplasm from which clear finger-like projections or pseudopodia appear. The nucleus is pale and often indistinct, but red blood cells are frequently seen in the endoplasm. Movement is rapid and purposeful. The nucleus has a thin nuclear membrane lined on its inner surface with a row of small chromatin granules. The karyosome is small, centrally located and surrounded by a clear unstained halo.

The cyst is shown in figure 3. The size varies from six to 20 microns. The shape is spherical and from one to four nuclei may be present. The cytoplasm is granular where the chromatin material is seen as rods or grape-like clusters. The nuclear membrane is smaller, but similar to the trophozoite. In the center of the nucleus is a single dense chromatin body, the karyosome.

3. Secretions

Sigmoidoscopy without prior preparation of the patient is an excellent method of obtaining fresh material for examination. Not only is the material warm and fresh, but large number of trophozoites may be demonstrated in scrapings of rectal ulcers, necrotic material and bits of bloody mucous. Material for examination is best obtained by scraping ulcers with a blunt rectal curette.¹³ Aspiration of secretions with a pipette or swabbing with a saline soaked cotton-tipped applicator may also be used to obtain satisfactory specimens when a curette is not available. The fresh material should be diluted with normal saline and examined immediately for motile trophozoites as well as several smears fixed in Schaudinn's solution or polyvinyl alcohol for permanent staining.



Figure 2: *Entamoeba Histolytica* Trophozoite in Saline Stool Preparation (600 X).

4. Biopsy Material

Rectal biopsy may be helpful in the diagnosis if one remembers that the majority of trophozoites are present in the mucus adhering to the mucosal surface.¹⁵ Caution should be observed in preparation of the tissue slides to preserve the adhering mucus as much as possible. The microscopist should examine the entire slide for trophozoites and not merely direct his attention to the tissue.

5. Stools

Large numbers of trophozoites may be demonstrated in liquid stools. A portion of the stool should be examined when fresh and the remainder fixed in polyvinyl alcohol for permanent staining. Fresh stool should be diluted with a few drops of saline and observed for motile trophozoites. Macrophages may be present and these must be differentiated from trophozoites. Macrophages contain larger nuclei but often contain red blood cells as do trophozoites. For this reason, the demonstration of typical ameboid motility is the only reliable diagnostic feature. Very few polymorphonuclear leukocytes are present in the stool as contrasted with bacillary dysenteries. Needle-like refractile crystals (Charcot-Leyden crystals) are usually demonstrable and are suggestive, but not diagnostic, of amebiasis. Patients who do not have watery stools at the time of examination must be purged with a saline cathartic and the liquid stool examined before the diagnosis of amebiasis can be excluded.

Although trophozoites are not present in formed stools, examination of bloody mu-

cous adhering to the surface of such a stool may reveal large numbers of trophozoites. Formed stools should be examined for cysts. This is best done by use of some concentration technique. A portion of the stool specimen should be placed immediately in five to ten per cent formalin-saline solution and pulverized with applicator sticks to assure good fixation. The specimen may then be sent to the laboratory for a leisurely examination using a concentration technique such as ether formalin concentration. The concentrated specimen is examined in a Lugol's Iodine preparation and permanent slides made using trichome or iron-hemotoxin stains.

The percentage of existing *Entameba histolytica* infections diagnosed by one stool examination is at best 65 per cent. The examination of six stool specimens increase this percentage to 95-98 per cent. Better results are obtained if stool specimens are obtained at intervals of several days rather than on successive days. There is little advantage to examining several slides from the same stool specimen. A higher percentage of infections can be diagnosed from examination of a single liquid purged stool for trophozoites than one formed stool for cysts.¹⁶

Preservation of specimens in polyvinyl alcohol and formalin not only provides material for staining some time after collection, but allows for expert microscopic consultation when adequate facilities are not available. Specimen bottles containing polyvinyl alcohol and formalin may be sent home with the patient for convenience in collecting stool specimens and these may be mailed to the physician for post-treatment examination.

6. Cultures

Facilities for culture of amebae are not available in most hospital laboratories. The microscopic examination of culture material itself requires special training. Cultures are probably of little practical value in the routine diagnosis of amebiasis if proper stool examinations are performed.

7. Complement Fixation Test

The complement fixation test also is not available in most hospital laboratories. The test is probably less than 70 per cent specific and becomes positive approximately three weeks after experimental inoculation.

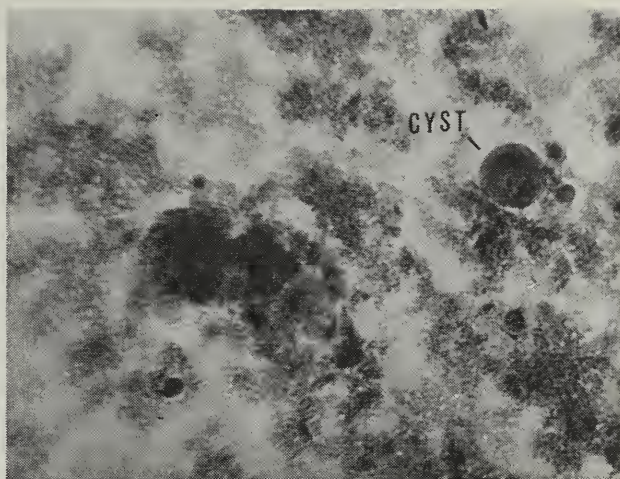


Figure 3: *Entamoeba histolytica* Cyst in Saline Stool Preparation (600 X).

A negative test is obtained usually three weeks after completion of adequate anti-amebic therapy. The major objection to the test has been the difficulty in preparing a standard antigen of consistent potency, stability and specificity. The antigen appears to be strain specific and the number of *Entameba histolytica* strains is unknown. Its only value may be in the suspected diagnosis of extra-intestinal amebiasis when stool examinations are negative.

8. Therapeutic Trial

A therapeutic trial is of greatest value when a colonic tumor is present in a patient with stools positive for *Entameba histolytica*. The disappearance of the tumor with anti-amebic therapy is excellent presumptive evidence that it was in fact an ameboma. Reduction in size of an enlarged tender liver with anti-amebic therapy may be the only evidence of an amebic abscess. The above response in a patient with a positive complement fixation test is considered diagnostic of amebic liver abscess.

Persistence of symptoms in a patient with suspected acute intestinal amebiasis following a therapeutic trial is suggestive of an erroneous diagnosis. This disappearance of symptoms in a patient with suspected acute intestinal amebiasis following a therapeutic trial is of questionable value in confirmation of the diagnosis.

THERAPY

Adequate therapy of amebiasis almost always requires a multiple drug regimen. No single medication is available which will eliminate both intestinal and extra-intestinal

infections. Another important consideration in therapy is the rapidity with which one must control acute dysentery, especially in children and debilitated patients. In the following sections, a discussion of the therapy of the various clinical forms of amebiasis, i.e., acute dysentery, intestinal amebiasis, and extra-intestinal amebiasis, will be presented.

1. *Acute Dysentery*

Emetine hydrochloride remains the most potent amebicidal drug and usually controls the acute symptoms of this form of the disease in 24-48 hours. Because of the potential myocardial toxicity of the drug and its cumulative effect, it should be administered only to hospitalized patients and never given for more than seven to ten days. It should be selected to initiate therapy only when the rapid control of acute dysentery is a critical factor. The broad spectrum antibiotics have been used successfully to control acute symptoms, especially in children and cardiac patients when oral medication cannot be taken or the patient is critically ill. Arsenicals and iodoquinolone drugs are also effective, so the average patient with acute intestinal amebiasis need not always be treated with Emetine hydrochloride.

2. *Intestinal Infection*

Arsenicals or iodoquinolones alone are rarely effective in eradicating the intestinal infection. For this reason an arsenical such as p-ureidobenzeneearsonic acid (Carbarsone®) is used to initiate therapy, followed by a course of an iodoquinolone such as diiodohydroxyquin (Diodoquin®). Therapy may be considered a success only if at least three stool specimens are negative for *Entamoeba histolytica* two weeks after completion of therapy and at repeated intervals for one year.

3. *Extra-Intestinal Infection*

Chloroquin phosphate (Aralen®) and Emetine hydrochloride are both highly effective in the control of hepatic amebiasis, and occasionally one will work when the other has failed. Because of the much lower toxicity of Chloroquin phosphate, there is no justification for using Emetine hydrochloride unless Chloroquin phosphate has failed. Even in the absence of overt hepatic disease it is desirable to treat the patient with Chloro-

quin phosphate since a liver abscess may occur at a much later date than colitis. When an abscess is demonstrable in the liver, needle aspiration should be performed after a course of Chloroquin phosphate. Surgical drainage of a liver abscess is rarely indicated and, if performed prior to a course of drug therapy, may be disastrous.

Extra-intestinal amebiasis in sites other than the liver are best treated with Emetine hydrochloride since Chloroquin phosphate concentrations in tissue other than hepatic are too low to be effective.

Amebomas represent unique extra-intestinal infections usually responding to arsenical or iodoquinolone drugs. Emetine hydrochloride should be instituted only after a clinical trial of an arsenical or an iodoquinolone. Surgical resection of amebomas without prior drug therapy carries a very high mortality rate and is rarely necessary after medical therapy.

SUMMARY

A discussion of the incidence of this disease in Oklahoma is presented along with current thinking on pathogenesis, diagnosis and therapy. It is hoped that the presence of this disease in Oklahoma can be re-emphasized and that thereby greater diagnostic awareness can be instituted. □

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ABSTRACTS

DANGERS OF INTRAGLUTEAL INJECTIONS*

The anatomy of the gluteal region is reviewed by the author in relation to complications of intragluteal injections. These complications include injections into the adipose and subcutaneous tissue leading to foreign body reaction, injury to the sciatic nerve, intravascular injection and injury to other nerves in the gluteal area.

There are three types of paralysis associated with sciatic nerve injury. 1) Immediate neuropathy with instantaneous pain; 2) Immediate paralysis without pain. This constitutes the largest group. 3) Delayed paralysis for several hours or days.

The peroneal nerve is the most commonly affected leading to foot drop. Damage to the nerve is independent of the type of medication administered. Intravenous injection can result in pulmonary emboli especially with oily base drugs. Intra arterial injection can lead to swelling, tenderness, and finally necrosis of involved parts. More serious complications can occur due to retrograde flow. These include gangrene of bladder, vagina, penis and rectum. Transverse myelitis has also been reported.

The usual area for intragluteal injections is the lower inner quarter of the upper outer quadrant of the gluteal region. This leads to injection of the upper lateral border of the gluteus maximus. Injection into more distal sites can lead to complications previously described. With this in mind, a more ventral gluteal site has been advocated by several authors. This site consists of the triangle bounded by the anterior superior iliac spine, the tubercle of the iliac crest and the upper border of the greater trochanter. The main assets of this site is its distance from major nerves and blood vessels and the fact that the patient can remain in the supine position. Its disadvantages are that it may be somewhat more painful and the patient can view the injection.

EDITOR'S NOTE: By reviewing the anatomy of the gluteal region, the reader can himself appreciate the pertinence of the author's remarks.

*Applied Anatomy of Intragluteal Injections, Ernest Lachman, M.D., *The American Surgeon*, 29:3, 236-241, March, 1963.

TEST FOR THROMBOPHLEBITIS AND PHLEBOTHROMBOSIS*

In this study the authors evaluate 1,000 consecutive patients admitted to the medical wards at the Oklahoma University Hospital with a test for lower extremity phlebothrombosis and thrombophlebitis. The test consists of placing a pneumatic cuff around the calf, inflating it to 200 mm. Hg over eight to ten second period and observing the patient for objective and subjective evidence of pain.

Of the 1,000 patients, 716 were considered suitable for evaluation. There were 118 positive and 598 negative results in this group. Patients with a positive test were divided into four groups according to their discharge diagnosis. Group 1) Pulmonary emboli, thrombophlebitis, phlebothrombosis. 15 patients. Group 2) Peripheral vascular disease other than group one. 18 patients. Group 3) Significant edema of the legs. 27 patients. Group 4) Miscellaneous disease. 58 pa-

tients. None of the patients in groups two, three or four developed evidence of phlebothrombosis or pulmonary emboli.

Of the 15 patients in Group One, 11 had positive tests on admission and a clinical diagnosis of thrombophlebitis or phlebothrombosis was made in all 11. Four developed positive tests following admission. All of these had evidence of deep vein disease clinically or at autopsy. Six patients in the entire series of 1,000 patients had autopsy evidence of pulmonary infarction. Two of these had positive tests and two were unsatisfactory and not tested. One of the two patients with negative tests had mural thrombi in the left atrium. The other had cerebral and coronary infarcts also. No examination was done of the leg veins.

The authors conclude that this test is positive in many cases where there is neither evidence for or against deep venous thrombosis. It appears to occur in settings of peripheral arterial disease and diminished cardiac output. A positive test however, occurred in several patients without any apparent basis. They note that a false negative test is apparently rare in that pulmonary emboli are unlikely to occur from deep leg veins if this test is negative. The occurrence of a positive test after a previous negative one should arouse suspicion of a thrombotic process. Like most diagnostic procedures this test requires individualization and experienced clinical judgment for useful interpretation.

*Semiquantified constriction of the leg, Thomas N. Lynn, Jerry B. Blankenship, Robert Bottomley, *Geriatrics*, 18:9, 713-715, September, 1963.

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Studies on *Calvatia gigantea*. I. Germination of basidiospores. G. S. Bulmer, E. S. Beneke, *Mycologia*, 53: 123-136, 1962.

Reprints of the above publications are usually available on request from the senior author, c/o Mrs. Joan Campbell, Veterans Administration Hospital, 921 N.E. 13th Street, Oklahoma City, Oklahoma.

Dean's Message

A Children's Pyelonephritis Clinic and a Cystic Fibrosis Research, Care and Teaching Center are among services recently established at Children Memorial Hospital to broaden the teaching program and offer greater referral facilities to the physicians of Oklahoma.

The pyelonephritis clinic was organized to meet the needs of increasing number of children with complex and chronic infections of the urinary tract that require long-term, continuous follow-up treatment. The clinic meets Friday mornings at Children's Memorial Hospital.

Hub of the Cystic Fibrosis, Research, Care and Teaching Center is the Cystic Fibrosis Outpatient Clinic held each Tuesday morning. Patients who require diagnostic screening and those who require follow-up visits as outpatients without hospitalization can be seen in this clinic.

Purposes of the cystic fibrosis center, supported by a grant from the National Cystic Fibrosis Research Foundation are:

1—To provide comprehensive care of the cystic fibrosis patient and his family.

2—To stimulate research by exposing medical students, interns, pediatric residents, clinicians in other fields, basic scientists, nursing and other paramedical personnel to the problems of cystic fibrosis.

3—To provide training for the above groups in all facets of cystic fibrosis.

4—To provide consultation on the various aspects of cystic fibrosis to physicians and health agencies of the southwest. The center also will conduct educational conferences for pediatricians and other physicians to present the latest advances in the diagnosis and management of the disease.

The cystic fibrosis program is a part of a nation-wide effort to pool and exchange information of this disorder.

Referrals of both cystic fibrosis and pyelonephritis patients are welcomed. Physicians may make referral arrangements by calling or writing the Director, Pediatric Outpatient Clinic, or the Pediatric Admitting Resident, Children's Memorial Hospital, University of Oklahoma Medical Center, 800 N.E. 13, Oklahoma City, Oklahoma. □

Mark R. Everett

TWO WEEKEND CONFERENCES BEGIN NEW YEAR

All OSMA Members Invited January 25th, 26th

Back-to-back meetings on the weekend of January 25th and 26th will set the stage for a full program of OSMA activities during the coming months. Scheduled for the Skirvin Hotel in Oklahoma City, the weekend will begin with Saturday's County Officers Conference, sponsored by the Council on Public Policy, and will conclude on Sunday when the First OSMA Conference on Mental Health is conducted by the Mental Health Committee of the association.

All members of the Oklahoma State Medical Association are invited to attend either or both meetings, and members of the Woman's Auxiliary to the OSMA are especially welcome. Particular emphasis is being placed

on attaining 100 per cent attendance from the officers of county medical societies and their auxiliaries.

OSMA President Joe L. Duer, M.D., terms the meetings "a worthwhile weekend designed to brief the responsible leaders of organized medicine in Oklahoma on some of the major issues and activities confronting the profession."

"The subject matter and the caliber of the speakers merit our attention and interest," Duer said, "and I hope the conference planners get the full support of the profession, because the effectiveness of our association will be tested in several important areas during the next year."

County Officers Conference

The County Officers Conference will be held January 25th in the Venetian Room of the Skirvin Hotel,

Oklahoma City. It will be primarily aimed at key matters in the field of public policy, such as:

The imminent problem of once again dealing with the legislative threat of the King-Anderson Bill; meeting the critical challenge of stabilizing Oklahoma's welfare health care programs; improving "Town and Gown" relationships in bolstering medical education during the current transitional period; and, inspiring all physicians and wives to devote more time and effort to the affairs of government and politics.

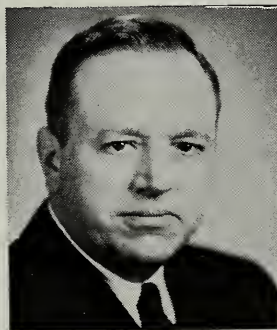
U.S. Congressman Durward G. Hall, M.D., will highlight an outstanding slate of speakers scheduled for the Saturday meeting. The Springfield, Missouri Republican gave up his practice of general surgery to take a direct hand in national government, but he has not relinquished his seat in the AMA House of Delegates. An inspiring speaker, he will appear on the luncheon program. His subject: "The Physician's Responsibility in Government."

"Operation Hometown," the AMA's campaign to defeat the King-Anderson Bill, will be covered in detail for conferees by several important speakers.

Aubrey D. Gates, Director of the AMA's Field Service Division and key member of the organization's Legislative Task Force, will appear on this portion of the program with James B. Foristel, AMA Congressional Lobbyist, and William R. DeMougeot, Ph.D., Director of Debate and Forensics at the North Texas State University, Denton. Gates will offer practical suggestions to county societies regarding the implementation of "Operation Hometown," Foristel will provide an inside look at



Doctor DeMougeot



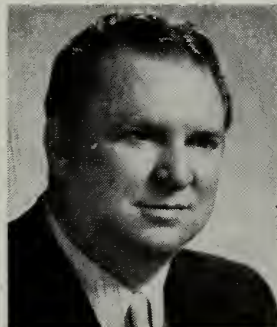
Mr. Foristel



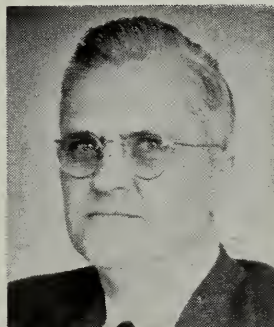
Mr. Gates



Congressman Hall



Speaker McCarty



Mr. Rader

the legislative scene in Washington, and DeMougeot will furnish facts, figures and sound arguments against all forms of socialized medicine, based upon original research for his doctorate.

Rex E. Kenyon, M.D., Chairman of the OSMA Council on Public Policy, will outline Oklahoma's plan to gain the necessary statewide reaction against King-Anderson legislation during the next session of Congress. A problem solving session will also be held for county leaders to exchange legislative campaign ideas with the panel of experts.

Another important section of the conference will be a discussion of Oklahoma's medical care programs for the needy aged, featuring the Honorable J. D. McCarty, Speaker of the Oklahoma House of Representatives, Lloyd E. Rader, Director of the Department of Public Welfare, and C. M. Bielstein, M.D., Chairman of the Department's Professional Advisory Committee. E. M. Gullatt, M.D., Chairman of the OSMA Public Welfare Committee, will preside and moderate a question and answer session.

Current problems in medical education and an appraisal of relationships between organized medicine and medical educators will be featured on the program in a panel discussion entitled "The Town and Gown Syndrome." Panelists are: Joseph M. White, Jr., M.D., Associate Dean of the O.U. School of Medicine, Vernon D. Cushing, M.D., Immediate Past-President of the Oklahoma County Medical Society, Nolen L. Armstrong, M.D., President, Oklahoma Chapter, A.A.G.P., and Wayne B. Starkey, M.D., Past-President, O.U. Medical School Alumni Association.

"Medicine and Religion," a new and important committee activity of the OSMA and its county medical societies will be presented to county officers by Fred W. Eberlein, AMA Department of Medicine and Religion, and by Allen E. Greer, M.D.,

Chairman of the state association's committee.

The day-long session of the County Officers Conference will be concluded with cocktails and dinner. After dinner, OSMA President Duer will address the group on "The Responsibility of Medicine's Leadership."

A registration form for the conference is on page 35. Luncheon tickets are \$2.75 each and dinner tickets are \$5.00 each. Your check for tickets should accompany registration.

Mental Health Conference

The First OSMA Conference on Mental Health is actually an extension of the County Officers Conference, since the presentation is directed at generally the same audience. But, because of the special importance of mental health during 1964, a separate one-day meeting has been planned by the OSMA Mental Health Committee under the direction of George H. Guthrey, M.D.

The mental health program will be presented on Sunday, January 26th, in the Venetian Room of Oklahoma City's Skirvin Hotel.

According to Doctor Guthrey, the conference is necessitated by previous neglect of mental health problems and by the resultant problems and pressures of the present time.

"Mental health has been treated as a poor relation by too many groups for too long a time," Guthrey said, "and now we are looking down the barrel of a nationwide effort to set the house in order. At the present time, our institutions are on the ropes for lack of financing, there is a severe shortage of psychiatrists and other trained personnel, governmental responsibility for the massive problem of caring for the millions of mentally ill persons is fragmented among many agencies, and the field of mental health in general has not kept pace with modern concepts of psychiatric therapy and good business management.

Purpose Stated

Doctor Guthrey said that the purpose of the First OSMA Conference on Mental Health is "to establish



DOCTOR ROME

guidelines, or at least to find a sense of direction for the OSMA to follow in the months and years ahead.

"Dramatic changes in the care of mentally ill persons are sure to come in the near future," he said, "and we must be quite certain that the medical profession knows where it stands and that it plays a responsible role in providing professional direction to the many activities underway."

Guthrey cited several recent events as justification for intensified interest in mental health on the part of practicing physicians.

In the 87th Congress, \$4.2 million was appropriated to be doled out to states for comprehensive mental health studies. Oklahoma's grant was awarded to the State Health Department, which launched a statewide survey on September 25th. Nearly half the people involved in the study are physicians, the mental health chairman reported, but they are operating without instruction or guidance from the medical association.

Shortly after the Oklahoma survey of needs was launched, President Kennedy signed into law Senate Bill 1576, the Mental Retardation Facilities and Community Mental Health Centers Act of 1963. This law provides \$329 million for building men-

tal retardation research centers; improving university affiliated facilities; grants to states for construction of community health centers; and, grants for the training of teachers of the mentally retarded and handicapped children. An effort to staff the community health centers with Federal employees was stricken.

On the local scene, the Legislative Council of the Legislature is now studying the state's institutional care system during the off season. The state mental health director resigned under legislative fire last Spring following severe pressure to reorganize the mental health program by taking management functions away from professional guidance.

Program Outlined

The morning session of the January 26th Conference will feature a keynote address by Howard Rome, M.D., Rochester, Minnesota. Doctor Rome is Chairman of the Section on Psychiatry of the Mayo Clinic and heads the American Psychiatric Association's Committee on Professional Standards.

Stanley F. Yolles, M.D., Deputy Director of the National Institute of Mental Health, Bethesda, Maryland, will speak on "The Federal Role In Mental Health."

"The Oklahoma Survey" will be explained in detail by its director, John D. Griffith, M.D., State Health Department, and Lester Hall, Director of the Oklahoma Association for Mental Health, will discuss the program of his organization.

A roundtable luncheon will feature Doctors, Rome, Yolles and Griffith, who will answer questions from the conference participants. In addition, Albert J. Glass, M.D., state mental health director, and Louis J. West, M.D., medical school psychiatry chief, will appear on the panel.

During the afternoon session, conferees will divide into topical section meetings for the purpose of developing guidelines to follow in dealing with various aspects of the overall mental health problem. The topics and discussion leaders are:

"Continuing Education of the Physician"—James L. Mathis, M.D., Instructor in Psychiatry, O.U., Okla-

homa City.
"Psychiatric Units in General Hospitals"—William T. Holland, M.D., Tulsa.

"Federal-State Hospital"—Albert J. Glass, M.D., Oklahoma Director of Mental Health, Oklahoma City.

"Problems of the Aged"—Hayden H. Donahue, M.D., Director, Central State Hospital, Norman.

"Alcoholism"—Louis J. West, M.D., Chairman of the Department of Psychiatry, O.U., Oklahoma City.

"Mental Retardation"—Harold J. Binder, M.D., Oklahoma City.

"Emotionally Disturbed Children"—James T. Proctor, M.D., Tulsa.

Following the topical meetings, the entire group will re-assemble in general session to hear reports from all sections. The reports will form the guidelines sought by conference planners.

All OSMA members and their wives are invited to register for the mental health conference. A registration form is printed on this page. Your check for luncheon tickets should accompany your registration. □

REGISTER NOW, DOCTOR!

(All OSMA Members and Wives Are Welcome)

1. Please make_____reservations for the *County Officers Conference*. January 25th, at the Skirvin Hotel, Oklahoma City.

My check is enclosed for_____luncheon tickets at \$2.75 each and for_____dinner tickets at \$5.00 each.

2. Please make_____reservations for the *OSMA Mental Health Conference*, January 26th, at the Skirvin Hotel, Oklahoma City.

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Hearings Resumed on Medicare Bill

On January 20th, Representative Wilbur Mills' House Ways and Means Committee will resume public hearings on H.R. 3920, it was announced recently. The hearings had been cancelled at noon, November 22nd, following President Kennedy's assassination.

At the time of cancellation, the main testifiers against the so-called Medicare Bill had been heard and the committee members were visibly moved by the preponderance of factual evidence presented. In fact, a member of the committee, Representative Tom Curtis of Missouri, was able to extract an admission from a Department of Health, Education and Welfare official that government estimates of the annual cost were at least 50 per cent less than actual. A billion dollar misrepresentation!

Now that the hearings are to be resumed, however, the AFL-CIO will hit with great force in an effort to dislodge the bill from committee to the floor of the House for a vote. The AMA and other major groups opposing H.R. 3920 have already been heard and the delay occasioned by the assassination will definitely work to the advantage of labor forces.

Letters Urged by Annis

Edward R. Annis, M.D., AMA President, has urged all the nation's physicians to put forth a special effort during late January and February to generate a large volume of mail into Washington.

"We need a deluge of expression from the grass roots of this nation reaching Washington in such volume it cannot be ignored," Annis said. The AMA chief especially requested letters from non-doctors, "... from all quarters of the country and from all walks of life."

Physicians from states which do not have a Congressman on the Ways and Means Committee, as in the case of Oklahoma, are to have their let-

ters directed to their own Congressman, with the request that he transmit the objection to his colleagues who are on the committee.

Letter Quota Set for State

Rex E. Kenyon, M.D., Chairman of the OSMA's Council on Public Policy, has launched a letter-writing program in Oklahoma designed to answer the appeal of Doctor Annis. Quotas for each county medical society have been set, and county society leaders and the general membership of the association have been contacted by mail.

"If the county societies and their auxiliaries meet the assigned letter-writing quotas during the next few weeks," Kenyon said, "Oklahoma will have done more than its share to meet the emergency." Doctor Kenyon has set an ambitious goal for each society, "but not too ambitious when you consider the importance of the matter."

The county societies, their county letter-writing quotas, and the per capita for individual doctors are printed below:

County	Quota	Per Doctor
Alfalfa-Woods	404	34
Atoka-Bryan-Coal	303	57
Beckham-Roger Mills	457	21
Blaine	241	40
Caddo	572	44
Canadian	495	26
Carter-Love-Marshall	1,043	33
Cherokee-		
Adair-Sequoyah	977	75
Choctaw-Pushmataha	494	55
Cleveland-McClain	1,207	23
Comanche-Cotton	1,375	45
Craig-Delaware-Ottawa	1,156	52
Creek	810	45
Custer	421	26
East Central	1,798	25
Garfield-Kingfisher	1,272	23
Garvin	566	40
Grady	592	26
Grant	163	30
Greer	295	29
Hughes-Seminole	864	36

Jackson	712	34
Jefferson	164	27
Kay-Noble	1,228	24
Kiowa-Washita	659	47
LeFlore-Haskell	765	51
Lincoln	376	42
Logan	373	33
McCurtain	517	70
Murray	212	30
Northwest	489	41
Oklahoma	8,790	15
Okmulgee	739	37
Osage	649	46
Payne-Pawnee	1,102	30
Pittsburg	342	31
Pontotoc	732	23
Pottawatomie	830	32
Rogers-Mayes	314	45
Stephens	760	38
Texas-Cimarron	373	37
Tillman	293	42
Tulsa	6,921	20
Washington-Nowata	1,064	21

Procedure Suggested

It is pointed out that the individual quotas are divisible by two, since physicians' wives should take at least half the responsibility.

For the physician's part, it is suggested that he use his waiting room to produce the letters. A simple writing desk can be set up with pens, plain stationery and anti-Medicare brochures available. Then the doctor and his office staff simply refer each patient to the writing desk and suggest that they consider registering a protest against a bill which would cost Oklahoma taxpayers another \$17,000,000 in new taxes; a bill which is unnecessary because the health needs of the indigent elderly are already being met in Oklahoma through the \$26,000,000 a year Kerr-Mills program.

The physician can further enhance his chances of producing the necessary volume by offering to mail the letters for his patients.

Brochures are available in quantity from the OSMA Executive Office, Box 18696, Oklahoma City, or directly from the AMA, 535 North Dearborn Street, Chicago 10, Illinois. □

Dates, Sites Announced For 1964 Regional Postgraduate Courses

Last year, from January through April, eight Regional Postgraduate Education Courses were held with a total of 228 Oklahoma physicians attending.

It was the third consecutive year that Regional Postgraduate Courses were successfully sponsored and conducted by the Oklahoma State Medical Association, through its Council on Professional Education.

The Council has once again selected eight sites in Oklahoma where the 1964 Postgraduate Courses will be held. Again, the courses will be conducted during the months of January through April.

With two courses offered each month, the Oklahoma State Medical Association opened its fourth consecutive year for sponsoring the decentralized program series with the January 14th Postgraduate Education Course held in Ada. The subject covered at the January 14th educational review was on "The Pancreas."

The program timing as well as the selected eight decentralized meeting sites are factors in keeping with the general purpose of the activity—which is to bring high quality scientific meetings to the doorstep of the practicing physician with a minimum infringement on office hours. The remaining seven programs will begin at 4:30 p.m. with two hours of lecture followed by dinner and another two-hour period of lecture and discussion. A registration fee of \$7.50 covers dinner and the scientific program.

According to R. R. Hannas, M.D., Chairman of the Council on Professional Education, any member of the Oklahoma State Medical Association may attend any one or more of the offered courses. Moreover, the Chairman pointed out that pre-registration may be made at the Oklahoma State Medical Association

Executive Office for any of the remaining courses by mailing a check in the amount of \$7.50 and designating the location where the preferred course is being held.

The remaining seven Regional Postgraduate Education Courses are to be held on the following dates, with the corresponding subject offered, and at the location indicated: January 28—"The Colon"—Altus. February 18—"The Heart"—Lawton.

February 25—"The Heart"—Bartlesville.

March 24—"The Central Nervous System"—Texhoma Lodge.

March 31—"The Central Nervous System"—Woodward.

April 21—"The Colon"—Enid.

April 28—"The Pancreas"—Miami.

R. R. Hannas, M.D., and Irwin H. Brown, M.D., Chairman of the Department of Postgraduate Education, University of Oklahoma Medical Center, are in charge of the overall program planning for the Regional Postgraduate Education Courses.

Assisting in the organization of speaking teams are the following O.U. faculty members: C. G. Gunn, M.D.—"The Central Nervous System"; Thomas N. Lynn, M.D.—"The Heart"; W. O. Smith, M.D.—"The Pancreas"; and Jack W. Welsh, M.D.—"The Colon." □

Oklahoma Chapter Of AAGP to Meet in Tulsa

Oklahoma's general practitioners will meet February 3rd and 4th in Tulsa's Mayo Hotel for the 16th Annual Meeting of the Oklahoma Chapter of the American Academy of General Practice.

A diversified program to interest all practitioners has been planned. Other features of the two-day meeting include a past-presidents' breakfast, a membership breakfast, the annual banquet, roundtable luncheons and special entertainment for wives of attending physicians.

The seven guest lecturers and their topics are:

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Arthur P. Klotz, M.D., Kansas City, Missouri, "Gastric Hypothermia" and "Functional Disorders of the GI Tract"; Fred M. Taylor, M.D., Houston, Texas, "Attitudes Toward Mental Retardation" and "Behavioral and Learning Problems in School Age Children"; Joseph D. Calhoun, M.D., Little Rock, Arkansas, "Mammography—A Clinical Appraisal" and "Radiotherapy—Jambalaya"; John T. Lowry, M.D., Laredo, Texas, "Diagnosis of Narcotics Addiction" and "Narcotic Laws as They Affect the Physician"; Foster Matchett, M.D., Denver, Colorado, "Office Orthopedics" and "Diagnosis and Treatment of Back Conditions Seen by the General Practitioner"; Gerald Honick, M.D., Oklahoma City, "Evaluation of Correctable Cardiovascular Disease"; and, Waltman Walters, M.D., Rochester, Minnesota, "The Indications and Advantages of Surgical Exploration." Physicians attending the conference may receive eight hours credit, category 1, from the AAGP. □

Top Band Booked For Annual Meeting

Joe Reichman and his orchestra, one of the top dance band groups in the nation, have been scheduled for the President's Inaugural Dinner Dance on Saturday night, May 2, 1964.

The event will be held at the Skirvin Hotel's Persian Room in connection with the 1964 annual meeting of the association. Reichman, famous as a crowd pleaser, features specialty numbers in addition to a wide selection of dance tunes, which provides a program designed to delight all of the people all of the time. He will perform from 9:00 p.m. until 1:00 a.m., following a prime rib dinner for doctors and wives and the traditional inaugural ceremonies.

Harlan Thomas, M.D., Tulsa, will be installed as President of the Oklahoma State Medical Association, succeeding Joe L. Duer, M.D., Woodward. An hour-long cocktail party will precede the evening's festivities.

Program Nears Completion

Other aspects of the 58th Annual Meeting of the OSMA are taking final form according to R. R. Hannas, M.D., General Chairman, and Irwin H. Brown, M.D., Scientific Program Chairman.

The full program of activities will begin at 1:00 p.m., Thursday, April 30th, when the OSMA Board of Trustees conducts its year-end meeting in the Venetian Room of the Skirvin. The House of Delegates convenes on the following morning, May 1st, for the first of two general sessions.

Speaker of the House Marshall O. Hart, M.D., plans to conclude the opening session of the delegates around mid-day, to permit the medical statesmen to attend the main scientific program which starts at 1:00 p.m. Business items introduced in the morning session will be referred to Reference Committees, which are scheduled to meet on Friday evening.

The closing session of the House of Delegates, where Reference Com-

mittee reports will be voted on and state officers elected, will be held on Saturday morning.

Scientific programming will place emphasis on the two afternoon sessions of Friday and Saturday, but other programs are also scheduled for Friday, Saturday and Sunday mornings. Sunday afternoon has been blocked off for specialty society and other meetings related to the state association event.

The Friday afternoon program will feature a discussion of blood pressure mechanisms directed to all fields of medical practice, to be discussed by visiting guest lecturers and local talent. J. David Robertson, M.D., Assistant Professor of Neuropathology, Harvard Medical School, has been named by Doctor Brown as one of the speakers scheduled for this session.

On Saturday afternoon, the theme will be "breakthrough" basic science developments and their clinical applications for use by the modern practitioner.

Friday and Saturday mornings will be covered by audience participation courses on office gynecology, film interpretation, the use of recently developed laboratory tests and dermatology for the general practitioner.

Other features of the annual meeting will include scientific and technical exhibits, a physicians' hobby show, the annual golf tournament, socio-economic, office management and legislative programs, and a special Peter E. Russo Memorial Conference on Medicine and Religion. □

Charity Cases Down?

Need proof that more patients are paying their bills? The U.S. Public Health Service says that one in five patients, 5.3 million, are getting some free hospital care today. In 1958, the Health Information Foundation reported that one in three U.S. patients, or 7.1 million, received some free care. The cause for the decline is felt to be the growth in voluntary health insurance. □

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Internal Revenue Rules Against Professional Corporations

Ignoring state laws existing in more than half of the states in the nation, the Internal Revenue Service announced proposed regulations on December 17th which will outlaw tax-deferred pension plans for physicians and other professional people who have attempted to use professional corporations and associations to achieve tax equity.

The proposed regulations will not become effective until after public hearings are held, and these hearings are expected to bring a storm of opposition to the arbitrary and contradictory action of IRS. Most of the professional corporation acts of the various states were actually patterned after IRS Regulation 301.7701-2(g) which illustrates in detail how a group of seven physicians associated themselves in a group that qualified for corporate tax treatment.

In the new regulations, the existing paragraph cited above is to be completely deleted, local law is said to be of "no importance" in determining the tax status of such organizations, and professional corporations and associations are ruled to be unqualified to classify under the established criteria test for corporate tax treatment, which follows:

1. The organization must have **continuity of life**.
2. It must have **centralization of management**.
3. **Limited liability** is required.
4. **Free transferability of interest** is specified.

To qualify, the revenue service says, the corporation must meet a majority of the above characteristics, and it feels that professional groups flunk the test. If the IRS proposed regulations stand up, physician incorporators will have to pay back taxes and interest on funds set aside for their retirement.

OSMA Files Protest

Any organization or individual

FRANK L. FLACK, M.D.
1887-1963

A well-known Tulsa surgeon, 76-year-old Frank L. Flack, M.D., died December 25, 1963.

A resident of Tulsa since 1928, Doctor Flack was a native of Longton, Kansas. He graduated from the University of Kansas School of Medicine in 1912 and practiced in Coffeyville, Kansas for 15 years before moving to Tulsa.

In 1962, Doctor Flack received dual honors from the Oklahoma State Medical Association. For the outstanding service he had rendered to humanity and to the medical profession, he was awarded an Honorary-Life Membership and a Fifty-Year-Pin.

Doctor Flack was a Diplomate of the American Board of Surgery and a member of the American College of Surgeons.

R. R. KINSINGER, M.D.
1909-1963

A practicing physician and surgeon in Blackwell for 23 years, R. R. Kinsinger, M.D., died December 16, 1963.

The 54-year-old doctor was a native of McPherson, Kansas and graduated from the University of Oklahoma School of Medicine in 1936. He established his practice in Blackwell in 1939.

Doctor Kinsinger was a Fellow of the International College of Surgeons.

LIN ALEXANDER, M.D.
1874-1963

Lin Alexander, M.D., 89-year-old Okmulgee physician, died November 12, 1963.

Doctor Alexander was born in wishing to complain about the new ruling may file written testimony before January 16th. The OSMA and other affected professional groups are filing a joint statement in protest to the regulations. The American Medical Association will send a representative to personally testify at the public hearing, the date of which has not been announced. □

Waco, Texas, March 23, 1874. Following his graduation from the Memphis Hospital Medical College in 1903, he moved to Okmulgee, four years before statehood.

Twice the Oklahoma State Medical Association had honored Doctor Alexander. In 1953 he was presented A Fifty-Year-Pin and in 1954 he was made a Life Member in gratitude for his long years of devoted service to humanity.

Again in 1954, he received an award of merit from the University of Tennessee Medical School in recognition of his 50 years loyalty to the medical profession.

JAMES FRANK CURRY, M.D.
1908-1963

James Frank Curry, M.D., who had been a general practitioner in Sapulpa for the past 28 years, died November 17, 1963.

Born April 18, 1908 in Carters Creek, Tennessee, the 55-year-old physician graduated from the University of Tennessee College of Medicine in 1934. The following year he established his practice in Sapulpa.

During World War II, he served with the medical corps near London.

WILLIAM M. YEARGAN, M.D.
1877-1963

William M. Yeargan, M.D., 86-year-old Hollis physician died December 12, 1962.

Born in Mena, Arkansas in 1877, Doctor Yeargan graduated from the University of Arkansas School of Medicine in 1910. After four years of practice in Umpire, Arkansas, he moved to Soaper, Oklahoma where he practiced for 13 years. In 1926 he moved to Hollis, where in addition to his private practice he served as county health officer for several years.

For his devotion to the medical profession, Doctor Yeargan was given an Honorary-Life Membership in the Oklahoma State Medical Association in 1947. □

BOOK REVIEWS

TEXTBOOK OF ANATOMY, W. Henry Hollinshead, New York, Hoeber Medical Division, Harper & Row, Publishers, 1962, pp. 1047, \$16.50.

With as many textbooks of anatomy as are available to the beginning student, any addition must perforce be of high quality and embody elements which have not heretofore been included in texts of this type. As he did in his three volume work on surgical anatomy, W. H. Hollinshead has emphasized the functional aspects and otherwise shown "the many ways in which anatomical knowledge influences clinical practice." These he has done well, but even this would not warrant the publication of just another textbook of anatomy for beginners if the book was not superior and if it did not incorporate other aspects which make it more desirable than its predecessors and contemporaries. The introduction reflects the author's experience as a teacher and his awareness of problems encountered by the beginning student of anatomy. It is refreshing in its approach. This is particularly true of the sections on study methods and terminology.

Part II, devoted to regional anatomy and comprising the greater part of the text, is arranged much as are other works of this type. However, certain aspects are superior. Charts and diagrams illustrating composition and distribution of peripheral nerves to parts of extremities and the trunk are easily read and understood. Illustrations are uncomplicated, concise and, in most cases, easily interpreted. Some of them appear to be oversimplified, but not to the extent of detracting from their purpose of adequately covering general principles of anatomy. In a few cases, where muscles overlap or where one parallels another, use of parallel lines to indicate muscles leads to some difficulty in visually separating one from the other.

Variations, anomalies, and abnormalities described with each unit should be particularly helpful to the beginning dissector as should the

glossary at the end of the book. Inclusion of a separate section on endocrines is very welcome.—*John E. Allison, Ph.D.*

THE AIR WE BREATHE; A STUDY OF MAN AND HIS ENVIRONMENT, edited by Seymour M. Farber and Roger H. L. Wilson, Springfield, Illinois, Charles C. Thomas, 1961, pp. 414, \$14.00.

Of all the environmental factors to which man is exposed, none is more important than the air he breathes. The normal adult passes a minimum of five million liters of air per year through his trachea and in his lifetime will breathe a volume comparable to the capacity of Madison Square Garden. This book, a record of a symposium which was held at the University of California Medical Center in San Francisco, deals with the ever growing amount of volatile and solid waste products which pollute the air of our great urban centers. Physicians, ecologists, town planners and engineers participated in a multi-disciplinary discussion of the socio-economic factors related to air pollution. The material is subdivided into five chapters: the normal atmosphere and its variation, the air pollution problem of industry (including atomic waste), smog and fog in urban living, pulmonary pathology related to airborne noxae, and finally, the lung cancer problem. A total of thirty authors, among them investigators from Great Britain and New Zealand present their material stressing the disaster potential of community air pollution. Several panel discussions are included, among which the most interesting one deals with the question "What can we do to make our cities more habitable?" Recommendations are made to arrive at a generally accepted terminology defining types of air pollution and for creation of a system of controls to achieve air pollution improvement. The last chapter on the inter-relationship between lung cancer, air pollution, and

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smoking habits, contains a great deal of controversy. On the balance, the evidence presented appears to favor a link between air pollution and lung cancer while the role of tobacco smoking in the pathogenesis of bronchial carcinoma is considered inconclusive. This may or may not be due to the fact that the Tobacco Industry Research Committee supported the symposium financially. The most interesting observation to this reviewer was a report by Dr. Eastcott which states that immigrants from Great Britain living in New Zealand have a 30 per cent greater chance of getting lung cancer than persons born in New Zealand. This observation is true in all ages and in both sexes. The conclusion is made that air pollution in Great Britain causes damage at a comparatively early age; the effect of this damage becomes manifest in later years, even though the person subsequently lived in a relatively clean environment. The smoking

(Continued on Page 42)

Miscellaneous Advertisements

WANT ASSOCIATE leading to partnership. Well established Internal Medicine practice, Tulsa. Congeniality as important as ability. Contact Key B, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

SPLENDID opportunity to move right in. Complete office furnishings for sale, including treatment room equipment and reception room furniture, also secretary's desk, etc. and doctor's private office furniture. The office space is available if desired. Contact Key H, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

OFFICE SPACE for rent, five-room suite, northwest area, Oklahoma City. Share reception room with established practitioner. Excellent opportunity for general practitioner, or specialist. Contact Elmer Ridgeway, Jr., M.D., 3601 North May. WI 3-3344.

1963 MERCEDES 300 SE. Like new, all extras. Priced to sell. Oklahoma City, VI 2-4574.

Book Reviews

(Continued from Page 41)

habits of immigrants and natives were identical.

While this book has some of the obvious shortcomings of a symposium transcribed from electronic tape, it contains a wealth of information which should be of interest to physicians in the fields of public health, industrial medicine and diseases of the chest. A subject index aids the reader to find specific topics of interest.—*Walter H. Massion, M.D.*

G.P. INTERESTED in general surgery, available for practice October 1, 1964. Graduate of University of Iowa School of Medicine. Medical service completed. Contact William E. Hall, M.D., 1022 Callanan Dr., St. Louis, Missouri.

BIG SAVINGS on "Returned-To-New" and surplus equipment. Reconditioned, refinished, guaranteed, X-Ray, examining tables, autoclaves, ultrasonics, diathermies, or tables, or lights, and more. Largest stock in the Southwest. WANTED: Used Equipment. TeX-RAY Co., 3305 Bryan, Dallas. (Open to the profession Wednesdays, Thursdays, 9-5. Other hours by arrangement.)

IDEAL opening for young doctor in well established medical clinic, sharing reception room and equipment with three other doctors. Wonderful location on North May Avenue, Oklahoma City. Contact Frank D. Thompson, 3115 N. Pennsylvania, Oklahoma City, JA 5-5700 or JA 4-9552.

GENERAL practitioner, age 34, desires associate general practitioner in South Oklahoma City. Supportive salary and/or percentage until established. Contact Key M, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

AVAILABLE: Specialist Internal Medicine with established Tulsa practice. Desire group or partnership association with five day week in Tulsa. Contact Key L, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

GENERAL PRACTICE group needs additional doctor interested in family practice. Office suite and minor surgical facilities available. Registered laboratory and x-ray technicians, full time business manager and office staff now in operation. New man will have no overhead except rent until his fees are being collected. We offer the luxuries of group practice with the unlimited opportunities of solo practice in a city of 100,000 with no arbitrary restrictions on hospital privileges. Clinic located in large residential area. Address inquiries to University Park Clinic, 4111 Call Field Road, Wichita Falls, Texas.

IMMEDIATE opening for General Practitioner. Practice established. Fine office space available. New hospital open only to M.D.s. Assume practice at no obligation. Contact Norman A. Cotner, M.D., Grove, Oklahoma.

OPENING for general surgeon, internist or general practitioner. Contact James W. Loy, Administrator, The Chickasha Clinic, Chickasha, Oklahoma.

LOCUM TENENS needed for two or three months, beginning February 15th. Would like to accept a call for mission service during this period and need a G.P. to look after my practice. Offer includes comfortable home and office, both rent-free, plus all net proceeds from the practice. Contact A. C. Hirshfield, 908 N.E. 50th, Oklahoma City 5, Oklahoma.

DESIRE location in Ob-Gyn. Board eligible graduate of Wisconsin Medical School, age 34. Contact Russell F. Mading, M.D., 7267 Renda Street, Millington, Tennessee.

Important Reading!!

The following address is not published because we agree with any conclusions or suggestions that it presents but because we believe physicians should know what men in other fields are saying. Sometimes concepts which are contrary to our own beliefs are distasteful but they serve a good purpose when they help to crystallize our own thoughts and dispel chronic inertia.

THE BLUE CROSS PUBLIC IMAGE

YOU ARE TO BE commended for soliciting the views of outsiders regarding the public image of Blue Cross and Blue Shield, and you're entitled to a thoughtful discussion of the subject. As a newspaperman, I obviously know much less about the actuarial complexities and the practical day-to-day problems of the health insurance business than you do. But as one who has written about medical care problems for quite a few years, I may perhaps be somewhat less subject to the professional hazard of failing to see the forest for the trees.

When I received your invitation to participate in this program, I got to thinking once again about some of the reasons for the climate of public discontent with voluntary health insurance and it occurred to me that in some respects there was an analogy here with the growing disarray in the Western alliance.

President Kennedy said not long ago that the strains within NATO were in themselves a sign of its success. As long as there was a real threat of Soviet aggression in Europe the democratic alliance had little trouble maintaining its cohesiveness, he said, but as

This address by Selig Greenberg of the *Providence Journal-Bulletin* was presented at the Blue Cross-Blue Shield Middle Atlantic and New England Regional Public Relations Meeting in New York City, September 12, 1963. Printed by permission of Mrs. Greenberg.

the Communist menace has receded it was inevitable that the allies should start quarreling among themselves.

Much the same thing may be true of Blue Cross and Blue Shield, which within the relatively short span of little more than 20 years have become an integral part of the American way of life. It is certainly difficult to see how we could possibly finance hospital care without the instrumentality of Blue Cross. As Americans become increasingly health conscious and as the costs of hospital and medical care keep on rising, it is to be fully expected that people should be more and more dissatisfied with the protection they are getting and demand still broader coverage.

There is no question that in large measure today's problems—not only in the field of health coverage but in all other areas of medical care—are the direct result of yesterday's successes. Medical science has scored prodigious advances in warding off death and opening up new vistas of healthier and longer life. But the scientific revolution has led to sweeping changes in the whole structure of medical care. It has profoundly affected the traditional arrangements under which medical services are rendered, organized and paid for. It is responsible for a price and demand spiral which shows no sign of leveling off. It has raised a host of bewildering problems with which we are likely to struggle for many years to come.

Many of the complaints one hears about the inadequacies of Blue Cross and Blue Shield are undoubtedly irrational and stem from an ignorance of what the non-profit plans can do without pricing themselves entirely out of the market. Inevitably, the public's attitude toward health insurance is colored by its frustrations with medical care in general. People are deeply concerned over the steadily climbing costs of medical care and they frequently resent the impersonality of the treatment they are getting from their

busy doctors. In an area as surrounded with emotion and as controversial as medicine generally is, the temptation is great to seek scapegoats and to offer panaceas.

It would nevertheless be a grave mistake to dismiss much of the criticism of voluntary health insurance as unfounded. Just as in the case of the Atlantic alliance, where President Kennedy's diagnosis is only partially correct and there are a number of solid reasons for the discord between the United States and some of its European allies, so health insurance is unquestionably confronted with some very difficult problems. The whole future of the organization of medical care in this country may well depend upon the ability of Blue Cross and Blue Shield to devise some bold approaches to the problems crowding upon them.

On the face of it, there are few more impressive success stories than the spectacular growth of health insurance in the United States.

There is probably no parallel in our history to the surge which has brought at least some form of health insurance protection to three out of every four Americans. From modest beginnings in the years after the depression, the health insurance movement has grown into a mammoth force which has had a far-reaching impact on the economics of medical care.

Sweeping changes in our economy have made possible this accomplishment, which is all the more remarkable in that no element of compulsion is attached to it. Of their own free will, the great majority of Americans have decided to relinquish part of their take-home pay to make certain that they will have some help in meeting their bills when illness strikes. More and more, they have become conscious of the benefits of medical care and stand ready to allocate an even larger share of their resources to pay for it.

But it is precisely in this greater health consciousness of Americans and their growing awareness of the contrast between what modern medicine can do and what it is actually doing that we have to look for some of the causes of the predicament in which voluntary health insurance now finds itself. The prepayment plans are increasingly

caught in the squeeze of rising prices for medical services and their uncontrolled use on the one hand and of a mounting demand for more comprehensive benefits on the other. Reluctant though they may be to rise to new challenges, Blue Cross and Blue Shield cannot escape the far-ranging crisis of cost and function brought about by the continuing scientific revolution in medicine and the changing public attitudes toward medical care.

Even in the area of enrollment, where its showing has been strongest, health insurance faces serious problems.

About 50,000,000 Americans still have no hospitalization insurance, the most predominant form of coverage. About 65,000,000 have no surgical expense insurance. Nearly 100,000,000 lack insurance protection against general medical expenses. Fewer than 35,000,000 have relatively broad insurance coverage against the costs of illness.

Those without coverage of any kind are mostly the aged, the disabled, marginal farmers, migratory workers and other low income groups, all of whom have medical needs that are well above the average and are least able to pay for the services they require. The ratio of prepayment coverage among those with annual incomes of \$7,000 or more is three and one-half times what it is for those earning less than \$4,000 a year. In New York it is about double what it is in Mississippi.

The days of easy expansion of voluntary health insurance are over. But in order to head off large-scale government intervention, it must continue to expand, both in enrollment and in its benefit structure. At the moment it is difficult to see how most of the existing enrollment gaps can be filled without the use of tax funds to help provide coverage for the aged and other categories of the population that are particularly poor insurance risks and least able to afford the premium payments.

Fully as grave as the problem of extending prepayment coverage to those who still lack it is the need for substantial improvements in the level of protection of those who already are insured. Here the issues are extremely abrasive because they go to the very heart of the present organization of medical care. Benefit levels cannot be ma-

terially revised without an unremitting concern for the costs of care which determine the price of insurance. This, in turn, requires sustained pressures for greater medical and hospital efficiency which cannot be achieved without some far-reaching organizational reforms. The health insurance plans, which are closely tied up with the medical profession and the hospitals, have understandably shied away from facing up to these issues. But they cannot duck them much longer.

The inadequacies of voluntary health insurance are most graphically demonstrated by two highly disconcerting facts.

The first is that while benefit provisions have progressively become more liberal, they still meet little more than one-fourth of the overall medical bills of those who are insured. According to the latest figures I have been able to obtain, prepayment now meets about 60 per cent of the costs of hospital care, 40 per cent of the costs of surgery, 30 per cent of expenditures for obstetrical services, less than 10 per cent of physicians' out-of-hospital fees and little or nothing for other services and goods.

The second perturbing fact is that the costs of both medical care and insurance have been rising much faster than the proportion defrayed by prepayment. While medical costs have been going up at the rate of five to ten per cent a year, the ratio of such costs met by insurance has shown an average annual increase of less than two per cent. At the same time insurance premium charges have been climbing during the past decade at an average rate of ten per cent a year under the impact of rising medical costs as well as decreased utilization.

There is no indication of any reversal of this disheartening trend, which keeps on depreciating the insured consumer's protection. The insurance plans will be unable to meet the demands for more comprehensive coverage so long as they exercise little control over the prices charged by doctors and hospitals and over improper utilization and none at all over the quality of care.

Virtually no attention has been paid by the insurance plans to the issue of quality controls, which is closely tied up with the question of costs. Blue Shield and the commercial carriers assume no responsibility

for the caliber of the doctors treating their subscribers. The same fees are set for the partially trained, inexperienced surgeon as for the most distinguished specialist. Not only do most insurance plans pay as cheerfully for bad medical care as they do for good but they actually encourage poor care by making needless surgery and other procedures lucrative through the guarantee of fees. The same rates are sometimes paid by Blue Cross to the unaccredited hospital as to the best teaching hospital.

At the root of many of the troubles of the predominant insurance pattern are two fundamental defects—the concentration on coverage for the costs of surgery and other illnesses requiring hospitalization and the neglect of preventive and diagnostic services. Both approaches are unsound, from the medical no less than from the economic point of view.

The net effect of these basic errors is that the prepayment system fails to provide any incentives for timely measures aimed at preventing disease or catching it in its incipient stages and that it promotes excessive use of costly hospital facilities and other abuses which needlessly inflate the bill. Most of the insurance organizations have yet to learn the irrefutable lesson that prevention, diagnosis, treatment and after-care are one continuous process and that it is more economical to try to prevent illness than it is to pay through insurance claims for the end results of neglect.

It is difficult to escape the conclusion that present insurance coverage is badly lopsided. It provides little protection or none at all for expenses incurred outside of the hospital which still make up the bulk of medical services. With the sole exception of surgery, its contribution toward physicians' fees is negligible. The costs of long-term physical or mental disease often remain largely uncovered. Home and office calls, drugs and appliances, dental services, nursing home care, home nursing services and a number of other medical care items have to be paid for directly by the great majority of insurance subscribers. What it amounts to is that most of the things deemed worthy of coverage when the patient is in a hospital bed are considered outside of the insurance framework when he is confined

to bed at home or is still on his feet. It is small wonder, then, that this setup provides a ready inducement for getting between hospital sheets.

It is true that physicians' home and office calls are relatively inexpensive. But a number of such visits is likely to add up to a substantial amount and to additional costs for laboratory tests and drugs which many people are unable to afford. The inevitable outcome is that early symptoms are frequently neglected and relatively minor complaints are allowed to develop into major ones.

The experience of HIP, the Kaiser Foundation Health Plan and other large prepayment organizations employing salaried physicians on a group practice basis has shown that it is feasible to provide coverage at a reasonable premium for a wide range of services now excluded by most insurance contracts. The main reason why the independent programs have been able to keep their costs within moderate bounds is that they pay their doctors according to the number of patients handled rather than for specific services. So long as the medical profession continues to cling to the system of solo practice and to resist effective checks on its fees and on the amount and quality of its services, the cost of truly comprehensive benefits will remain prohibitive.

The basic trouble appears to lie in trying to superimpose a modern concept of comprehensive health prepayment on the ramshackle structure of solo practice. Insurance is merely a mechanism for spreading risks and cannot in itself solve the problem of ballooning medical costs. On the contrary, by removing some of the economic barriers to utilization of services it tends to generate demand and thus becomes an inflationary factor. The over-all bill can best be cut through intensive development of preventive medicine to reduce the incidence of illness and a more efficient organization of medical and hospital services. The preservation of the traditional fee-for-service method under an expanded voluntary insurance system is possible only with a much greater degree of responsibility than the medical profession has yet displayed.

All too often these days, insured patients are shocked to discover that they lack coverage for many services, that prepayment meets only a fraction of the costs of covered procedures, that their doctors can charge them extra if their incomes are above a certain level, and that under the archaic Robin Hood system of medical fees some physicians actually hike their bills by counting insurance as an additional asset and thereby defeat its main purpose. Oddly enough, the resentment of the insured is mostly aimed at Blue Cross and Blue Shield rather than at the commercial carriers, which do a much less creditable job. It is taken for granted that the latter are in business to make a profit and nothing else.

Most disturbing is the growing trend of many Blue plans in recent years to turn to experience rating. This development violates the whole intent of community-wide coverage designed to spread the financial hazards of illness by having the good risks help pay for the poor ones. Under experience rating, those who need care most are charged the most, even though they are often least able to afford it. By pricing prepayment protection beyond their reach, this approach has implications of the utmost gravity for the whole future of voluntary health insurance. The non-profit plans cannot hope to extend their coverage to those who are still entirely without it and to carry out the urgently needed expansion of benefits by adopting the practices of commercial insurance. If this trend continues, some form of government action to help insure the poorer risks will become the only feasible alternative.

Many competent authorities feel that Blue Cross and Blue Shield will be unable to carry out fully their public responsibilities until they come to grips with the innate conservatism of the medical professions and hospital managements and start using their great leverage in order to improve the organizational efficiency of medical and hospital care.

There is no getting away from the fact that there have been radical changes in the whole character of medical services, in the age makeup of our population and in the pattern of illness itself. Nor is there any denying of the distressing fact that the health care job now being done in the United States falls far short of what it could be with the

knowledge, skills and tools currently at our command. Sober examination of the realities of the American medical scene shows that while at its best the quality of medical care in this country is unsurpassed, much of it is uneven and some of it quite poor; that adequate medical care is not now available in full measure to people of low and even medium incomes; that the poor, the aged, the mentally ill and others who need medical care most generally receive the meagerest amount and poorest quality of services: and that we still carry a heavy burden of needless illness, suffering, disability and premature death.

Blue Cross finds itself right in the middle of the explosive issue of hospital costs, which are now more than five times what they were in 1935.

There is little doubt that the remarkable growth of hospitalization insurance has had both favorable and adverse effects on hospital operations. Insurance has brought hospital care within the reach of millions in the middle and low-income groups and has been a potent force in expanding the scope of services and improving the quality of personnel. But insurance also has led to overuse of hospitalization, some overbuilding of hospital plants and a general relaxation of pressures for economy of operation.

The general policy of insurance programs to reimburse hospitals for their costs has reduced, if not wholly removed, incentives to keep expenditures at their lowest possible level. Insurance has not only stimulated demand but has had a substantial impact on the distribution of medical care facilities. The exclusion of benefits for ambulatory and nursing home care from prepayment coverage has led to pressure for use of general hospital beds by patients who could get along with less costly care. Some authorities estimate that at least 20 per cent of patients in general hospitals do not belong there and could be cared for just as well in less expensive facilities. At the same time, the lack of assurance of sufficient operating funds has deterred the development of adequate nursing homes, rehabilitation facilities and home care services.

Another impediment to economy are two of the voluntary hospital's outstanding characteristics. One of them is the key role played by doctors in the functioning of hos-

pitals and the pyramiding of their costs. The other is the traditional and grossly outdated autonomy of the voluntary hospitals. Having grown at random rather than by design, the hospitals operate without any centralized planning or effective public controls and continue to expand in a hit-or-miss fashion which often makes for wasteful duplication of facilities and services. There is no other community enterprise as big as hospital care and so closely partaking of the nature of a vital public utility in which there is such a lack of coordination and such a diffusion of administrative controls.

Hospitals have yet to readjust themselves to the radical alteration in their financial base. What were once institutions largely depending on philanthropy now draw the lion's share of their support from paying patients, mostly through insurance benefits. But there has been no corresponding change in the composition of hospital governing boards. By and large, hospital trustees continue to be drawn from the upper social strata. They now generally represent former sources of income rather than the broad ranks of the consumers. Nor are lay controls on members of the medical staffs anywhere near commensurate with their privileges. Although physicians use hospital facilities for their own profit without payment of rentals or overhead costs, they don't take kindly to the policing of the quality of their services and regard any efforts to control their fees as the rankest kind of heresy.

There has also been a lag in realizing the full significance of the drastically altered relationship between the producers and the consumers in medicine.

The fact that more than 130,000,000 Americans now have some form of health insurance is bringing about a fundamental change in attitudes toward the economics of medical care. More and more, arrangements for paying for at least some medical services are no longer made between individual physicians and patients who are sick and anxious. They are being made instead by groups of people who are well and capable of making up their minds as to how they want to spend their money. No longer forced to bargain when they are flat on their backs, they are much less likely to accept the medical profession's claim to exclusive authority in an area in which it

has no special competence. Health Insurance has proven to be a good deal more than merely a mechanism for spreading the risk of the cost of illness. It has not only generated new demand but has become a rallying point for the organization of consumers determined to get their money's worth.

Blue Cross has yet to readjust itself fully to the changing dimensions of the medical economy and of its own constituency. It is still all too often inclined to confine its role to that of a collection agency for the hospitals rather than an intermediary between the purchasers and suppliers of hospital care. At the root of its quandary is its schizophrenic posture—the fact that it is a public service and yet must also be a business to survive in a competitive setting. It is under pressure for more comprehensive coverage but is unwilling or unable to exercise any significant controls on hospital utilization and costs without which broader benefits would be wholly impracticable.

By the very character of their sponsorship, both Blue Cross and Blue Shield have thus far been largely inhibited from taking advantage of the most promising potentialities of modern health care—those of preventive and rehabilitative medicine. Instead of a more subtle organization of health services on a continuing rather than episodic basis, instead of a more precise fitting of services and facilities to each patient's condition, their approach has been to lump all of the sick into the costly general hospital. Neglected have been the opportunities for more economical preventive practices, for facilities designed to meet the simpler needs of the ambulatory ill and convalescent and for nursing home and home care for the chronically ill.

The defects and problems of Blue Shield are pretty much the same as those of Blue Cross and are further complicated by the fact that it is the creature of the medical profession and firmly tied to the solo, fee-for-service practice of medicine. This makes any meaningful controls on the quantity and quality of services extremely difficult, if not impossible.

The Blue Shield fee schedule, which largely determines the level of its premium rates, is wholly under the control of the people who

collect the fees. But although the insurance plan guarantees the doctors full payment of their fees even in the case of low-income patients who formerly paid little or nothing, few of them seem to be in a mood for sacrifices. Many physicians appear to regard Blue Shield mainly as a mechanism for improving their collections rather than as a means of more effectively serving their patients.

One of the most significant developments in recent years has been the increasing exercise of state regulatory authority in the health insurance field. Commissioner Smith of Pennsylvania may no longer be in office but his policy of using the power of the state to try to check the continued upsurge of hospital and the prepayment costs is certain to live on. It paves the way for public intervention in the manner which hospitals are built, operated and used and in many of the practices of the medical profession which contribute to spiraling costs. Logic dictates that since the premium rates of Blue Cross and Blue Shield are subject to state control, the state must gradually extend its concern to hospital management and other elements which enter into health insurance costs.

The mechanisms of health insurance are clearly far too crucial to be left wholly in the hands of the purveyors of medical services. The implementation of the goals of wider insurance coverage will require greater exercise of public initiative and regulation. It also will call for the highest restraint and sagacity on the part of the medical profession and its cooperation in urgently needed controls on costs, utilization and quality of services. The extension of prepayment into new segments of health care which are inherently more difficult to insure will require far more effective controls than now exist if we are to avert the danger of runaway costs. Only through the wholehearted collaboration of all concerned can the objectives of broader and more effective insurance protection at a practical price be achieved principally on a voluntary basis.

Whatever the final outcome is, insurance already has wrought drastic changes in the economics of medical care and brought new intermediaries into the relationship between doctors and patients. Insurance programs have great potentialities for becoming the

defenders of the patients' interests. To castigate the introduction of so-called "third parties" is as fatuous as it is futile.

During the health care debate in the 1940s the issues seemed quite simple—compulsory government-operated insurance versus voluntary insurance. By now, as we continue to grope for answers, we have come to understand that the problems are infinitely more complex and cannot be that easily compartmentalized. The voluntary approach is deeply rooted in the American tradition. It has many desirable qualities and guards against the freezing of patterns in an area of constant flux. But it calls for a sense of responsibility, for a readiness to subordinate narrow guild interests to the public welfare, for a willingness to experiment, for imagination and boldness. Let us hope that the medical profession—and the non-profit prepayment plans along with it—will learn to display these attributes in a measure tantamount to the challenge. □

"I Told You So!"

AN AMA PRESIDENT once said: "Too many physicians are simply 'making book' on the outcome of Medicare legislation, when what we really need is fewer bookies and more jockeys."

The potential might of organized medicine, here in Oklahoma as well as across the nation, has not been realized despite the repeated appeals of its leaders. H.R. 3920 contains a principle which will destroy the private practice of medicine; but even such high stakes fail to motivate the majority of physicians.

A payroll tax to provide benefits for a portion of the population will surely bring about cries to lower the arbitrary age limit requirements so that more people can benefit. Lobbies will form to expand the services of the program. Politicians will become concerned about spiralling costs. And the medical profession will soon be economically suppressed and scientifically hamstrung.

Your Council on Public Policy has an important project going to defeat Medicare. Read about it on page 73.

Cooperate, please!

Don't make it necessary for us to say, "I told you so!" □

The Responsibility of Medicine's Leadership

I, AS WELL AS OTHERS here, started my working life following an old team of mules behind an old walking plow. I resolved early in life that was not for me. Could I have foreseen the changes that were to come about in farm life, and have realized at that early age that this medical life was so burdensome, I might well have stayed on the farm.

Thirty years ago this month I hung my shingle in the practice of medicine. I could not name—nor do I need to—the hundreds of changes that have taken place in the practice of medicine since that date, much less the changes that have transpired in our entire way of life here in these United States and the world. This thirty years—one generation—might well become known as the generation that has produced the most profound changes upon civilization, second only to that generation during which Christ trod this earth.

Changes continue and will continue. Such is life, and civilization cannot be counted dead as yet! With changes one finds himself, and his profession, in one of three positions: Lagging behind; Moving with the crowd; or, Leading the pack.

In a profession such as ours with interests so vital to civilization itself, if leadership is not forthcoming, catastrophe is sure to follow. No one—no group—no agency—can safely guide the destinies of medical practice except the practitioners themselves. Are we, as a profession, assuming that leadership as we should? Or, are we backing and filling, making expedient moves, reluctantly accepting the inevitable with confused amazement at the situation in which we find ourselves? If this latter is true, and there is great evidence that it is to some extent, then why?

What are the prime requisites for leadership? Those of us who had experiences in the Armed Services during the last great war know that the officers known as "the ninety day wonders" that had been made

Presented by Joe L. Duer, M.D., President of the Oklahoma State Medical Association, at the OSMA County Officers Conference, January 25, 1964.

(Continued on Page 79)



I don't believe in horoscopes, or signs of the Zodiac, but when one notes some of the great names of American history that first saw the light of day during this month, one is struck by the apparent coincidence—names such as Abraham Lincoln, George Washington, Thomas A. Edison, Charles A. Lindbergh, Henry W. Longfellow, to name some. (And let me forget the age but remember that this month, too, is the month of the birthday of my wife!)

Nor should we forget some of the more important issues of the present day that will be in the forefront this month. This, above all times, is the time to write to your senators and representatives. Write, not only about the King-Anderson type of legislation, but about many of the other proposals and issues that will so vitally affect our way of life.

Can we fulfill our responsibilities as citizens and not realize that we will be affected by such things as urban renewal, area re-development, civil rights, tax reduction, budget balancing, foreign aid, Cuba, Panama, the Far East, aid to education, etc? The list could be extended indefinitely.

All of us are aware of the threats of socialized medicine, but how much thought are we giving to many of the threats not included in King-Anderson type of legislation? What do you know about area-wide hospital planning, and what is the best answer to the problem? What are our policies on mental health? Are we fully aware yet that this is an election year? With it comes the opportunity once more to express ourselves at the ballot box and, at every opportunity, to our fellow citizens. Have we so lost faith in the power of the ballot that we will abrogate our rights, not only to vote, but to inform ourselves and our neighbors about the issues and the candidates? Who, among us, does not know about OMPAC, what it is for, and what it can do for us? And yet how meager are the responses with contributions and help that we can give!

A recent political battle cry was to the effect that we cannot afford to have third rate citizens, but are we being anything else when we do not contribute our efforts, our knowledge, our opinions and our influence to support candidates of our philosophy, or to oppose those things that are contrary to our way of life? NO ACT OF CONGRESS CAN MAKE A FIRST CLASS CITIZEN. No nation can be a first class nation without first class citizens. Only the citizens themselves, by their efforts, their opinions, their labors, their devotions to the things for which this country stands and which made it great from the beginning, can become first class citizens.

Let us then this February—this year of 1964—rededicate ourselves to those aims and purposes so nobly spoken by one whose birthdate we honor this month—"it is for us the living, rather, to be dedicated here to the great task before us—that from these honored dead we take increased devotion to that cause for which they gave their last full measure of devotion—that we here highly resolve that these dead shall not have died in vain—that this nation under God, shall have a new birth of freedom—and that government of the people, by the people, for the people, shall not perish from the earth." □

Joe L. Quigg, M.D.

“Heart Month”

FEBRUARY has long been designated as “Heart Month,” and it has been the custom of *The Journal* of the Oklahoma State Medical Association to devote the entire issue to articles concerning some facets of heart disease. The articles that follow were chosen to fulfill this purpose and are derived principally from the efforts of the residents and research fellows at the University of Oklahoma Medical Center.

Originally all but one of these papers were presented at various conferences held recently at the Medical Center. It was felt that these efforts in postgraduate education deserved a wider audience and a permanent format. With the cooperation of our authors, the papers were edited slightly, but they represent what was said at the time of the conference. Each of these conferences was devoted basically to the consideration of an actual clinical problem currently bedeviling the staff at the Medical Center and each represents the consideration given the problem at the time.

Management of Acute Pulmonary Embolism

WILLIAM S. MYERS, M.D.
WM. BEST THOMPSON, M.D.
GALEN P. ROBBINS, M.D.
ROBERT M. SMITH, M.D.

The use of Isuprel may affect the clinical course of pulmonary embolism favorably by allowing time to prepare for definitive surgery.

DESPITE IMPROVEMENTS in current therapy, the deleterious consequences of acute pulmonary embolism continues to be a source of harassment in clinical medicine. A large number of investigations have indicated that a complex interaction of respiratory and hemodynamic alterations are produced by acute embolization.

Many studies of the hemodynamic alterations have been conducted employing a variety of materials, as well as autogenous blood clots as emboli. Data were usually obtained from open chest experiments or isolated lung perfusion technics. The application of these data to the clinical management of patients with pulmonary embolism has been questioned.

The development of more refined technics for intravascular catheterization has made

it possible to study the pulmonary and vascular changes induced by pulmonary emboli in the closed chest animal.

Utilizing these technics, accurate measurements of pressure, oxygen saturation, pulmonary blood flow, circulating blood volume and pulmonary vascular resistance may be obtained in a closed chest animal.

In a series of animal experiments reported by Hyman and Myers¹ in this country and Halmagyi, Colebatch, Starzecki and McRae² in Australia, it was found that isoproterenol (Isuprel) tended to protect both dogs and sheep from the ill effects of pulmonary emboli to a greater degree than other drugs used—notably pressor amines, atropine and a specific serotonin antagonist. Pressures were obtained by trans-atrial septal and routine right heart catheterization. Pulmonary blood flow and circulating pulmonary blood volume were measured by introducing an indicator at the pulmonary valve and sampling from the left atrium. Both macerated autogenous clotted blood and foreign material were used as emboli.

In the untreated animals pulmonary embolization resulted, as it does in the human, in a marked drop in cardiac output, circulating pulmonary blood volume and systemic arterial pressure. The pulmonary artery pressure and pulmonary vascular resistance increased sharply. In the animals treated by infusion of Isuprel, the cardiac output (pulmonary blood flow) remained greater than the control period. The circulating pulmonary blood volume remained at control level and the pulmonary vascular resistance rose to less than 30 per cent of that in the untreated embolized animals.

From the Medical Service, Oklahoma City Veterans Administration Hospital and the Department of Medicine, University of Oklahoma School of Medicine.

William S. Myers, M.D., is Clinical Assistant in Medicine; Wm. Best Thompson, M.D., is Assistant Professor in Medicine; and Galen P. Robbins, M.D., is Instructor in Medicine at the University of Oklahoma School of Medicine. Robert M. Smith, M.D., is taking a residency at St. Anthony Hospital in Oklahoma City.

The data obtained from these experiments indicate that Isuprel increases the pulmonary blood flow without significantly changing the pulmonary vascular pressure. In addition, these data reveal an increase in the pulmonary blood volume and indicate that Isuprel produces active pulmonary vasodilatation.

In consideration of the above information clinical trial of Isuprel in the management of acute pulmonary embolism appeared justified.

CASE REPORTS

Case 1. W.C., a 58-year-old white male was admitted to St. Anthony Hospital on March 12, 1963 for repair of recurrent right inguinal hernia. Post-operatively while walking, he was noted to gasp, try to cough, and then faint, having momentary apnea. The blood pressure was 50/0 and a Vasoxyl drip elevated the pressure to 76/50 with a heart rate of 110/min, respirations were 30/min and shallow. He was pale, sweating and poorly responsive; decreased breath sounds were noted at the left base. An electrocardiogram revealed an incomplete right bundle branch block which was not present in 1960. Nasal oxygen and intravenous heparin were given. In spite of these, the blood pressure decreased. Intravenous Isuprel (0.2 mgm/1000 cc) was substituted for Vasoxyl with a prompt rise in blood pressure to 104/70. The patient became alert. Three hours later an electrocardiogram revealed normal ventricular conduction but atrial fibrillation. It was felt that Isuprel may have been implicated in the arrhythmia and it was discontinued. There was a prompt drop in blood pressure to 80/50. For the next 36 hours, the patient was maintained on Aramine. The rhythm spontaneously reverted. A chest film 72 hours after onset revealed only slight elevation of the left diaphragm. He was discharged two weeks later on oral anticoagulants.

Case 2. C.V.R., a 60-year-old white female, diabetic of long duration, underwent amputation of the left leg because of gangrene. Twelve hours post-operatively, the patient became unresponsive and cyanotic with rapid respirations. The blood pressure

was 80/50; the pulse rate was 48/min. An Aramine drip was instituted without change in blood pressure. An electrocardiogram revealed a right ventricular diastolic overload picture which was not previously present. Nine hours after onset, Isuprel was begun with prompt elevation of blood pressure to 110/60 and a heart rate to 80. She became moderately responsive and urine production occurred, the first in nine hours. Two and a half hours later, she was found without vital signs.

Post mortem revealed a large thrombotic pulmonary embolus in the left main pulmonary artery and its secondary branches. There was right ventricular dilatation and marked passive congestion in the liver.

Case 3. A 47-year-old extremely obese white female was admitted to St. Anthony Hospital in April, 1963 with swelling and pain of the right arm. She had been admitted in 1961 with a diagnosis of left lower leg thrombophlebitis and a pulmonary embolus. On admission to the ward, she was cyanotic with a blood pressure of 60/40. There was tenderness to percussion in the left lower chest. Electrocardiogram revealed right ventricular hypertrophy and right atrial enlargement. Blood pressure did not respond to intramuscular and intravenous Aramine. Isuprel 0.2 mgm/1000 cc was begun intravenously with a prompt rise in blood pressure to 100/80. She was maintained on Isuprel for 36 hours when she appeared stable. In the ensuing six days, she developed a progressive respiratory acidosis and expired.

Post mortem revealed a single recent, organizing pulmonary embolus and multiple small emboli in the small vessels, an extensive thrombus in the right subclavian vein as well as right ventricular and atrial enlargement. A localized adenocarcinoma of the stomach was also noted.

DISCUSSION

Experimental evidence indicates that various factors are at work in producing the clinical syndrome of shock secondary to pulmonary embolism. It is recognized that a balloon catheter may occlude either of the main pulmonary arteries in man without causing appreciable change in the pulmonary

artery pressure, systemic pressure or cardiac output.

Evidence indicates that pulmonary embolism results in active pulmonary vascular constriction. The drop in cardiac output results from decreased pulmonary venous return to the heart and is not the result of changes in peripheral vascular tone and its concurrent venous pooling. Isoproterenol appears to ameliorate these changes in the experimental animal and perhaps in man.

It is apparent that drug therapy, specifically the use of Isuprel, is not a definitive measure. However, until we are provided with an adequate and safe drug for lysis of thrombotic material, embolectomy remains the only definitive therapy. It would appear from this limited clinical experience that the

intravenous use of Isuprel may affect the course of a pulmonary embolus favorably and by so doing provides the necessary time for preparation for surgery.

The concept of treating a shock syndrome with a vasodilating agent is contrary to previous medical teaching, however currently accepted therapy is far from satisfactory. Mounting experimental data and these few patients indicate the need for further clinical trial. ☐

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Pheochromocytoma

MARY E. PUNTENNEY, M.D.

The incidence, symptoms, laboratory findings and treatment of pheochromocytoma are reviewed.

PHEOCHROMOCYTOMA was first described in 1886 by Frankel. Then in 1926 Charles Mayo successfully removed at surgery the first pheochromocytoma but without the benefit of preoperative diagnosis. In 1928 the first preoperative diagnosis of such a tumor followed by successful surgical extirpation was accomplished.¹ Since that time the world literature has grown and pheochromocytoma has become established as an unusual but always possible etiologic agent in hypertension. It therefore becomes worthwhile to review the diagnosis and management of this disease.

INCIDENCE

There is no sex or age preference of pheochromocytoma. Ten per cent of the tumors are bilateral, 16 per cent are multiple, and ten per cent are malignant. The incidence of pheochromocytoma as the etiologic agent in hypertension is 0.05 per cent to one per cent of all hypertensive patients. About 40 cases of the familial form of this disease have been reported in the world literature. The trait for pheochromocytoma is inherited as a dominant with no sex linkage and with

a high degree of penetrance.² Of interest is the fact that 56 per cent of the familial tumors are bilateral.³

The adrenal medulla forms embryonically from the migration of neural crest cells which are of ectodermal origin. The adrenal medulla is composed of chromaffin tissue as are the ganglia of the sympathetic nervous system. Pheochromocytoma then may occur in any location outside the adrenal medulla which normally or abnormally contains chromaffin tissue as well as in the adrenal medulla itself. The most common site for this tumor outside the adrenal medulla is in the organ of Zuckerkandl located at the terminal bifurcation of the abdominal aorta. About six per cent of the tumors are in the chest.

SYMPTOMATOLOGY

The symptoms of pheochromocytoma vary greatly and in part depend on the relative amounts of epinephrine and norepinephrine being produced by the tumor. It should be remembered that epinephrine has marked influence on the heart rate and causes central nervous system excitement and hyperglycemia. Norepinephrine on the other hand has its principle action on the peripheral circulation to cause marked vasoconstriction but also causes increased cardiac output. Pheochromocytoma may manifest itself by hypertension, vasomotor phenomenon, sweating and tachycardia. The hypermetabolic state with weight loss and increased basal metabolic rate with nervousness and anxiety may be another mode of presentation of patients with pheochromocytoma. Polydipsia, polyphagia and polyuria may be present.

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Particular attention should be paid to these since pheochromocytoma may mimic diabetes mellitus, severe anxiety states and hyperthyroidism. Although all chromaffin tissue contains the enzyme necessary for methylating norepinephrine into epinephrine tumors occurring outside the adrenal glands or the organ of Zuckerkandl have never been reported as producing epinephrine. The symptoms of pheochromocytoma may be precipitated by emotions, changes in posture and physical activity. The traditional syndrome associated with pheochromocytoma of paroxysmal hypertension, anxiety, dizziness, palpitation, nausea, vomiting and sweating occurs in only about one-third of the cases. In the others, hypertension is fixed and the symptoms are variable.

LABORATORY FINDINGS

Laboratory findings of interest, aside from specific tests for the presence of the tumor, include polycythemia, albumin and cells in the urine (50 per cent), slightly elevated blood urea nitrogen, and elevated blood sugar.⁴ The polycythemia is relative and is apparently due to continued vasoconstriction from the circulating hormones from the tumor and a consequent decrease in the plasma volume while the red cell mass remains stable. The presence of cells, albumin and the infrequent elevation of the blood urea nitrogen are secondary to the effects of the catecholamines on efferent arterioles of the kidney causing constriction of these arterioles and an increased perfusion pressure in the kidney. Eventually, as the vasoconstriction increases and the perfusion pressure increases, cells and protein come through the glomerulus. When this process passes a certain pathological point whole nephron populations cease to function and the blood urea nitrogen may increase. It has been shown in man that during a paroxysmal attack of hypertension the urea clearance may drop 50 per cent. The metabolic effect of epinephrine in the liver is responsible for increased glycogenolysis and elevation of the blood sugar in patients with pheochromocytoma. Of patients with this tumor who have a normal blood sugar at

least ten per cent have abnormal glucose tolerance curves.

The diagnosis of pheochromocytoma is based primarily on the history, the finding of hypertension, and laboratory examinations to support the clinical suspicion of tumor. The use of the provocative histamine test to induce a hypertensive episode in a patient with pheochromocytoma may precipitate a marked rise in blood pressure and may be accompanied by vascular accidents threatening the patient's life. This test should be used only with special precautions and with full knowledge of the possible consequences. The standardized test with intravenous Regitine® is most important clinically as a screening test for pheochromocytoma. This test is influenced by hypertensive drugs, sedatives, barbiturates and narcotics but with the knowledge of these limitations it may still be invoked as an important screening test remembering that if the test is negative in a patient with hypertension and a suggestive history of pheochromocytoma further laboratory procedures are indicated and justified.

Currently the most reliable tests for pheochromocytoma are the urinary determination of catecholamines and vanillyl mandelic acid (VMA). Table 1 demonstrates the metabolic fate and alternate pathways of metabolism shared by epinephrine and norepinephrine. Only about four per cent of infused epinephrine or norepinephrine are excreted in the urine as catecholamines and would thus be measured in a urinary assay for catecholamines. An alternate pathway of metabolism is responsible for 35-40 per cent of infused catecholamines excreted in

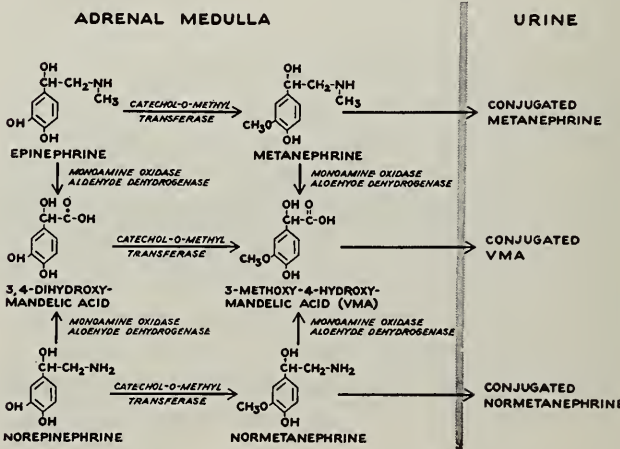


Table 1.

the urine as 3-methoxy-4-hydroxy-mandelic acid (VMA). Thus it is logical and has been reported clinically that one may have normal catecholamines in the urine and yet have elevated VMA levels in the presence of pheochromocytoma.⁵ Elevated levels of VMA are reported in patients with pheochromocytoma and with neuroblastoma. However, normal amounts of VMA in the urine have not been reported in the presence of pheochromocytoma and in only a few reported cases has the VMA been only slightly elevated. The VMA is also elevated in the absence of hypertension in patients with pheochromocytoma.

The determination of urinary catecholamines and VMA is also subject to interference by diet and drugs. The presence of bananas in the diet may elevate urinary determinations falsely because of the high levels of catecholamines in bananas. The presence of coffee and tea as stimulants may increase these levels as will foods containing vanilla.

Three classes of drugs may interfere with these urinary tests. First, the sympathomimetic amines (amphetamine, cocaine, tyramine) are monamine oxidase inhibitors and prevent the conversion of the catecholamines into the VMA pathway interfering then with VMA measurements. Second, the antihypertensive drugs (Reserpine, Guanethidine) act to alter tissue stores and tissue discharge of the catecholamines and may interfere with these tests for these reasons. Third, the adrenergic blocking agents may also interfere with urinary tests for pheochromocytoma.

LOCATION OF TUMOR

Since the pheochromocytoma may occur outside the adrenal glands the preoperative location of the tumor is often difficult. The use of presacral or perinephric carbon dioxide is relatively safe, only transiently uncomfortable for the patient and may outline a tumor in the adrenal gland. Aortography may also be of help by showing a tumor stain in the area of the adrenal. The intravenous pyelogram may show displacement of the kidney with rotation but may also be perfectly normal in the absence of a large tumor. Tomographs of the kidney-adrenal area

are of no value in making this diagnosis. Calcification within the tumor may occur but is an unusual finding. The use of the venous catheter with repeated samples at different levels in the vena cava and analysis of these for catecholamines may indicate the venous drainage pattern of the tumor and thus be of value in determining the preoperative localization of the tumor. Fractionation of the urine for the presence of epinephrine may give an additional clue to location. If epinephrine is present, 95 per cent of the tumors will be in one or both of the adrenals and the remaining five per cent will be in the organ of Zuckerkandl. If no epinephrine is present in the urine the tumor may be in any of the many locations pheochromocytomas occur.

TREATMENT

The treatment of pheochromocytoma is surgical. The surgical management of these patients is difficult because severe hypertensive attacks may be precipitated by handling of the tumor and must be controlled with intravenous Regitine® in amounts capable of controlling the blood pressure. Conversely, clamping of the blood supply to the tumor may result in marked hypotension by removal of the cardiac and vascular effects of the catecholamines and by expansion of the vascular bed. The resulting shock must be treated with norepinephrine (Levophed®) and fluids. The anesthetic problems are compounded in patients with pheochromocytoma for several reasons. Anoxia is a potent stimulant to epinephrine production and may occur with induction of anesthesia. The catecholamines also sensitize the myocardium to cyclopropane and halothane so fatal arrhythmias may develop. Diethyl ether causes increased secretion of catecholamines and may lead to dangerous hypertension as may cyclopropane by increasing tissue responsiveness to the catecholamines.⁶ Currently it is thought that the safest anesthesia includes induction with thiopental with meprobamate as the preanesthetic agent and the use of nitrous oxide and succinylcholine to maintain anesthesia. Caution is taken to keep the patient especially well oxygenated during intubation. The results of surgery and the completeness of surgical extirpation

can be evaluated by post-operative VMA levels in the urine which rapidly return to normal with successful and complete removal of the tumor.

Isolated patients have been described with unusual manifestations of these tumors in association with other endocrine adenomas or malignancies. It is also of interest that other diseases of ectodermal origin may be found accompanying pheochromocytoma, namely, neurofibromatosis, Hippels Disease, Sturge-Weber Syndrome, Tuberous Sclerosis and Cafe Au Lait Spots.⁷ ☐

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Clinical and Laboratory Findings in Chronic Constrictive Pericarditis

JOEL GIST

The symptoms, signs and diagnostic studies of importance in chronic, constrictive pericarditis are discussed.

THERE ARE SEVERAL classical signs of chronic constrictive pericarditis, some of which are presently felt to be rather inconsistent. This paper presents both the classical symptoms and signs as well as the newer observations made possible by newer procedures and attempts to correlate hemodynamic findings with these symptoms and signs. All have a common basis in the main physiological defect—impediment to diastolic filling of the ventricle.

SYMPTOMS

Abdominal swelling from liver enlargement, with or without ascites is often the first symptom in chronic cases.^{8,9} At this stage the patient is usually fairly well. The patient may have no edema since cardiac edema depends more on diminished cardiac output and renal blood flow than on the height of venous pressure.^{4,5} Cardiac output is usually better maintained in chronic constrictive pericarditis than in heart failure

with a comparable rise in venous pressure. *Edema* does, however, occur in most patients.¹

Shortness of breath is not always prominent in the patient's history perhaps because the cardiac output is fairly well maintained in this disease. However, shortness of breath does occur to some degree sooner or later in almost all patients.^{1,9}

Orthopnea occurs in 46 per cent to 90 per cent.^{3,9} The suggestion that patients with orthopnea have predominantly left-sided constriction is not borne out by surgical findings.

Syncope occurs less frequently than the above symptoms. Three of a series of 20 reported by McKusick had syncope with exertion.⁶ Probably the most likely explanation is the failure of the cardiac output to increase adequately with exercise.

SIGNS

Hepatic enlargement and *ascites* are not more frequent or severe in chronic constrictive pericarditis than in pure right ventricular failure, disease of the tricuspid valve or heart failure from cardiomyopathy with a comparable sustained rise of mean venous pressure.

Systolic blood pressure and *pulse pressure* are characteristically low. However the pulse is more likely to be better maintained than in cases of myopathic heart failure with a similar degree of venous hypertension because the cardiac output is usually higher.

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Paradoxical pulse is characterized by a decrease in the amplitude of the pulse which occurs during the inspiratory phase of respiration. This is certainly not a constant finding in chronic constrictive pericarditis (only 15 per cent of the inactive cases reported by Paul Wood⁹). Nor is it confined to chronic constrictive pericarditis for it may be seen in some cases of heart failure, in cardiac tamponade and other disorders. The explanation of the mechanism of paradoxical pulse probably best accepted is that with descent of the diaphragm, there is further tensing of the pericardium with an increase in both systemic and pulmonary venous pressures. With this increased obstruction to left ventricular inflow there is a diminished pulse volume or paradoxical pulse.

The most characteristic feature of the *venous pulse* is the diastolic sharp "y" descent and a deep "y" trough. This represents a high filling pressure, sudden release of pressure due to rapid tricuspid inflow, followed by a sharp rise of pressure when further expansion of the ventricles is prevented by the fibrotic pericardium. A similar kind of venous pulse, however, can be seen in the patient with an overloaded right ventricle which resists late diastolic filling. An "x" descent of the venous pulse in systole when the lateral walls of the ventricles have difficulty in curving inward has been noted by Gibson.² The chief clinical importance here is that this may be helpful in differential diagnosis because it is not seen in tricuspid stenosis or heart failure.

Atrial fibrillation and less frequently atrial flutter may occur as a complication of inactive disease of long duration. These atrial arrhythmias occur in 29-50 per cent of cases.^{1, 8, 9}

A marked *diminution of cardiac impulse* is highly characteristic of this disease but heart size is slightly to markedly enlarged in about one-half of cases. Therefore the heart is not the "small, inactive heart" that has been described.

The most characteristic single *auscultatory finding* as described by McKusick⁷ is an early protodiastolic sound which occurs closer to the second sound than a protodias-

toxic gallop and is sometimes confused for a split second sound. The extra sound is likely to be louder and more clicking when there is extensive calcification in the pericardial scar, and may frequently exceed the first and second sound in intensity. The pulmonary second sound is frequently increased in intensity because a certain amount of pulmonary hypertension due to left-sided constriction is frequent.

DIAGNOSTIC STUDIES

X-ray examinations demonstrate calcification in 30-70 per cent.^{1, 6, 8, 9} Cardiac pulsation is diminished as a rule, sometimes in one part of the heart shadow more than another. As mentioned above the heart may show moderate to marked enlargement in about one-half of cases. A dilated superior vena cava is seen in many patients with chronic constrictive pericarditis, presumably due to increased venous pressure for so long that elasticity of the vena cava is lost.⁶

The *electrocardiogram* shows a fairly distinct pattern with lowering of voltage and flat or slightly inverted T waves. The QRS complex is essentially normal except for decreased voltage. Arrhythmias, when present, are well shown.^{1, 8}

Electrokymography or roentgenkymography reveals a "flat-top and V" pattern of ventricular border movement explained by rapid ventricular filling (because of increased atrial pressure) which comes to an abrupt halt relatively early in diastole with a standstill in ventricular filling during the remainder of diastole.⁷ The protodiastolic sound has been demonstrated by simultaneous recordings of heart sounds and ventricular border electrokymography, to be due to rapid ventricular filling early in diastole or an abrupt halt in ventricular filling.⁶

CARDIAC CATHETERIZATION^{1, 5}

Characteristic findings include: (a) elevated right atrial and left atrial pressures; (b) sharp "y" descent and deep "y" trough in majority of right and left atrial pressure tracings (as described above in the venous pulse); (c) early diastolic dip in right or left ventricular pressure curves synchronous with the atrial "y" trough and followed

by a plateau through the remainder of diastole; (d) elevated end-diastolic pressures in both ventricles equivalent to their respective end-diastolic atrial pressures; (e) stroke output that varies little in response to changes of venous filling pressures. □

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Renal Hypertension and Secondary Hyperaldosteronism

DONALD L. HICKS, M.D.

The syndrome of hypokalemic alkalosis associated with renal hypertension which is thought to result from secondary hyperaldosteronism is described.

RENAL ISCHEMIA caused by renal artery stenosis, usually resulting from atherosclerosis, has been recognized to be one of the causes of hypertension in recent years. More recently, a syndrome of hypokalemic alkalosis accompanying renal hypertension has been recognized^{1,2} and is thought to be the result of secondary hyperaldosteronism. Investigation of the kidney's role as an endocrine organ is yielding information that is not only exciting but is helpful in understanding the pathophysiology of this syndrome. This paper reviews some of the newly gained knowledge and recently proposed theories about how renal artery occlusion can cause hyperaldosteronism as well as hypertension.

Figure 1 outlines the chain of events following partial occlusion of a renal artery.³

JUXTAGLOMERULAR APPARATUS

The juxtaglomerular apparatus (JGA) is an organ that is in intimate association with the afferent arteriole of the renal glomer-

ulus. It responds to decreased renal arteriolar pressure (and perhaps also to the sodium concentration in the tubule) by secreting renin. The JGA consists of two cell types. (1) The granular cells lie within the medial layer of the wall of the afferent glomerular arteriole and thereby may function as a "stretch" receptor that constantly monitors pulse pressure. These cells have small, uniform granules in the cytoplasm which are clearly stained with Bowie's stain or osmic acid. When the granules are abundant the granular cells have the appearance of actively secreting cells.⁴ With electron microscopy these cells are seen to lie next to the intimal layer of the afferent arteriole while the opposite side of the cell interdigitates with the macula densa cells.² These macula densa cells are specialized cells that are part of the first portion of the distal tubule and their function is not entirely clear unless they respond to decreased sodium concentration in the tubular lumen by stimulating renin production.

There is good evidence that the JGA cells do produce renin.³ (1) With unilateral renal artery stenosis that produces hypertension there is an increase in the JGA granules on the affected side (caused by decreased "stretch" in the JGA) and a decrease in granularity on the unaffected side (hypertension causing increased "stretch" in the JGA). (2) The presence of renin can be demonstrated only in areas of the kidney which contain glomeruli and by microdissection techniques renin can be found only in the half of the glomerulus containing the

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JGA. (3) Fluorescein-tagged antibodies for renin can be shown to localize in the cytoplasm of the granular cells of the JGA.

There are conditions other than renal artery stenosis that may be associated with increased granularity of the JGA: adrenal insufficiency, shock and chronic low sodium intake. These conditions have in common a decreased pulse pressure. Several conditions may be associated with decreased granularity: high sodium intake, primary hyperaldosteronism and, as already noted, the normal kidney opposite one with renal artery stenosis.

RENIN

Renin, which is produced by the JGA, acts as a proteolytic enzyme on an alpha-2 globulin in the blood to form angiotensin I, a biologically inactive decapeptide. It, in turn, is rapidly converted to angiotensin II in the presence of a plasma "converting enzyme."

ANGIOTENSIN II

Angiotensin II is an octapeptide that has two important actions: it stimulates the production of aldosterone by the adrenal cortex and is the most potent known vasopressor (ten to 50 times as potent as norepinephrine). Lower plasma levels of angiotensin II will cause less aldosterone secretion than will produce a pressor response.

ALDOSTERONE

Aldosterone is the most potent mineralocorticoid produced by the adrenal cortex. It is uncertain that aldosterone secretion is entirely controlled by angiotensin II but it is known that ACTH from the anterior pituitary has little effect on it.

The primary action of aldosterone is to increase reabsorption of sodium from the lumen of the distal renal tubule. Sodium is reabsorbed at the expense of potassium and hydrogen ions which are excreted.

Aldosterone also has some effect on the electrolyte composition of body fluids other than urine. Hyperaldosteronism causes a relative decrease in sodium concentration and an increase in potassium concentration (a decreased Na/K ratio) in saliva, sweat

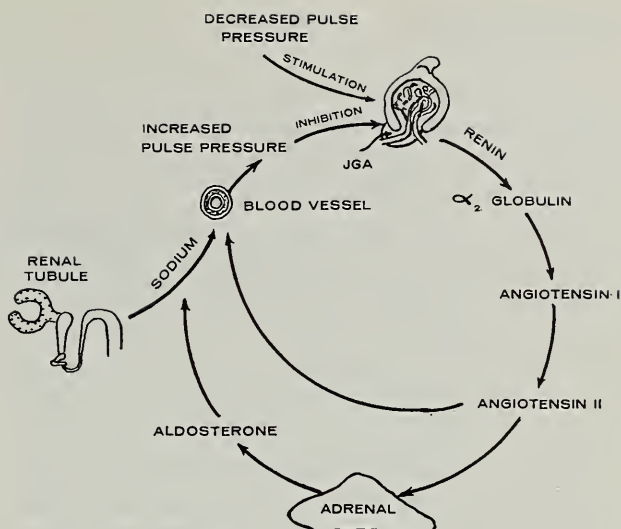


Figure 1. The Interaction of renin, angiotensin and aldosterone.

and feces. In fact, the salivary Na/K ratio has been used as a screening test for increased secretion of aldosterone.⁵

SECONDARY HYPERALDOSTERONISM AND RENAL HYPERTENSION

The events diagrammed in Figure 1 show that hyperaldosteronism as well as hypertension may result from renal artery stenosis. The syndrome of secondary hyperaldosteronism may become clinically apparent in only a few cases of renal hypertension but when it does occur it may cause severe electrolyte imbalance. As sodium is reabsorbed from the renal tubular lumen in response to high levels of aldosterone, large amounts of potassium and hydrogen ions are lost in the urine resulting in hypokalemic alkalosis.

Prolonged hypokalemia that accompanies hyperaldosteronism will cause anatomic and functional lesions in the nephron. Renal biopsy specimens show foamy or vacuolated cytoplasm in the tubular epithelial cells and urine concentration becomes impaired. This is the so-called "hypokalemic nephropathy" that is accompanied by polydipsia and polyuria.⁶

The clinical syndrome of secondary hyperaldosteronism associated with the hypertension of renal artery stenosis may now be described. First of all, the patient with hypertension from renal artery stenosis is detected by renal arteriogram and by "split" urine function tests. Polydipsia and poly-

uria are prominent in the history and the patient may produce large volumes of hypotonic urine. The serum potassium is low, frequently in the range of one to two mEq per liter, and there may be electrocardiographic evidence of hypokalemia. Metabolic alkalosis is present as demonstrated by an elevated serum CO_2 and an elevated blood pH. The serum sodium may be normal or low, unlike primary hyperaldosteronism where it is elevated; why this is present is unknown but the serum sodium like the other abnormalities may return to normal after surgical correction of the renal artery lesion. Urinary aldosterone levels may be elevated or normal.

If, in hyperaldosteronism, the dietary intake of sodium is restricted little sodium may reach the distal renal tubule, having been reabsorbed in the proximal tubule. The potassium and hydrogen ions can be conserved and the hypokalemic alkalosis may disappear. Therefore a low sodium diet may mask the presence of secondary hyperaldosteronism.

Several other conditions must be considered in the differential diagnosis.

(1) Severe essential hypertension may result in arteriolar nephrosclerosis which causes stenosis of the afferent arteriole thereby providing the stimulus which initiates the series of events leading to hyperaldosteronism and hypokalemic alkalosis. When this occurs there may be increased

granularity in the juxtaglomerular cells of both kidneys.

(2) Diuretic-induced hypokalemia may occur in essential hypertension. There will be a history of ingestion of thiazide diuretics and the hypokalemia will disappear after the drug has been withdrawn.

(3) Primary hyperaldosteronism, or Conn's syndrome,⁷ is caused by an aldosterone secreting adrenal cortical adenoma. In this syndrome hypertension, hypokalemic alkalosis and hypernatremia are present. Decreased granularity of the juxtaglomerular cells may be demonstrated as the increased blood pressure inhibits secretion of renin.

CONCLUSIONS

The pathophysiology of secondary hyperaldosteronism associated with hypertension caused by renal artery stenosis has been reviewed and the clinical syndrome has been described. □

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Hyponatremia

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This paper summarizes the historical aspects, physical findings and laboratory data encountered in the clinical state of hyponatremia.

HYPONATREMIA, the clinical state associated with a lowered concentration of sodium in the plasma, occurs during the course of various disease states in which it is an incidental or major complication. Hyponatremia can occur only as a result of a body deficit of sodium or potassium, of an overabundance of water, or of a combination of these factors.¹ The most common cause of hyponatremia is ineffective excretion of water in the face of excess water intake, for which the physician's parenteral administration is sometimes responsible.²

It may be difficult or impossible in an individual patient to determine which of these mechanisms is responsible for the hyponatremia. It is important to remember that more than one abnormality may be present in any one form of hyponatremia. This can be demonstrated if the clinical cases of hyponatremia are listed (see below) under the various disturbances mentioned. When the clinical condition is due to more than one functional abnormality, it is listed with an

asterisk under that abnormality which is considered the principal cause.

Excessive Water Intake with Normal of Increased Total Body Sodium

A. Water Intoxication

1. Inappropriate ADH
 - a. Central nervous system lesions*
 - b. Increased intra thoracic pressure*
 - c. Acute porphyria
2. Post-traumatic
 - a. Post-surgery
 - b. Post-commissurotomy
3. Excess water intake during anuria
4. Water intake exceeding renal excretory rate

B. Abnormal Sodium and Water Excretion

1. Congestive heart failure, especially after thiazide diuretics*
2. Hepatic cirrhosis, especially after thiazide diuretics*
3. Chronic or acute renal failure*
4. Nephrotic syndrome

C. Metabolic Alkalosis with sodium movement into cells

Sodium and Water Depletion with Inadequate Sodium Replacement

A. Excessive Renal Sodium Loss

1. Iatrogenic (Drugs)
 - a. Thiazide diuretics*
 - b. Mercurial diuretics,* Diamox
 - c. Excessive anion load, *e.g.*, ammonium chloride
2. Endocrinologic disease
 - a. Adrenocortical insufficiency
 - b. Withdrawal from steroids
 - c. Myxedema
3. Intrinsic renal disease
 - a. Sodium losing nephritis (infrequent, usually pyelonephritis)
 - b. Diuretic phase of acute renal failure

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- c. Chronic renal failure (usually with acidosis) with inadequate sodium replacement
- 4. Osmotic diuresis
 - a. Diabetes mellitus
 - b. Large amounts of osmotic diuretics
 - c. Ketosis, acidosis
- 5. Central nervous system lesions ("cerebral salt wastage")
- B. Gastrointestinal Loss (diarrhea, vomiting, fistulae, suction, etc.)
- C. Post-traumatic
 - 1. Post-surgery
 - 2. Post-commissurotomy
- D. Skin Loss
 - (1) Burns (2) Excess sweating* (3) Dermatologic lesions
- E. Loss within Body Spaces
 - 1. Severe urticaria
 - 2. Increased capillary fragility
 - 3. Milk leg
 - 4. Pleural or abdominal effusions
- F. Asymptomatic Hyponatremia
 - 1. Advanced pulmonary disease
 - 2. Cachexia and malnutrition
 - 3. Abnormal aging
 - 4. Portal cirrhosis

Hyperlipemic Pseudo-hyponatremia

It must be appreciated that the concentration of sodium in the extracellular fluid is largely determined by the relationship between the intake and excretion of water, rather than the relationship between the intake and output of salt. The reason for this is that sodium occupies a unique position in the body. It, together with its anions, makes up 90 per cent or more of the osmotically active constituents of the extracellular fluid. Consequently, the concentration of sodium in plasma and extracellular fluid reflects the effective osmotic pressure* of the extracellular fluid and provides no information concerning the total amount of sodium in the body. With hypo-osmolality of the serum, there is always hyponatremia; with rare exceptions, hyponatremia does not occur unless hypo-osmolality is present.³ An exception to this generalization is seen in hyperlipemic pseudo-hyponatremia where

*Effective osmotic pressure is that exerted by solutes that do not penetrate cell membranes rapidly. Urea may contribute appreciably to total osmotic pressure. However, it does not affect the distribution of water between cells and surrounding fluids, since it penetrates cells freely and its concentration in cell water and extracellular fluid water is approximately equal.

serum lipids may, by displacing serum water, produce a low concentration of sodium in serum despite normal sodium concentration in serum water.⁴

Antidiuretic Hormone: The hypothalamic hypophyseal system is important in its effect on urine flow and concentration. Normally, a small rise in effective osmotic pressure of the extracellular fluid stimulates osmoreceptors along the distribution of the middle cerebral artery to cause release of antidiuretic hormone (ADH). This is mediated through the hypothalamus and the posterior pituitary. The latter gland apparently serves as a storage depot for the hormones. ADH increases the permeability of the distal renal tubular segment to water and promotes both a decrease in urine excretion and the elaboration of a hypertonic urine. Hypo-osmolality of the extracellular fluid normally causes the osmoreceptors to decrease the secretion of ADH, and water diuresis ensues as a result of a decrease in water permeability of the distal segment of the renal tubule. With normally functioning kidneys, this regulatory device functions to prevent the development of hyponatremia unless non-osmotic stimuli capable of promoting hormone excretion are active.

In certain patients with pulmonary disease, intracranial disease or acute intermittent porphyria, hyponatremia is produced when the water intake is elevated. The secretion of antidiuretic hormone in these subjects is not depressed by hypotonicity of the extracellular fluid. This *inappropriate secretion of antidiuretic hormone* results in abnormal water conservation maintaining hyponatremia. Lowered aldosterone secretion and excessive urinary loss of sodium may ensue following expansion of extracellular and total body fluid by the retained water. The treatment of this syndrome is to treat the underlying cause where possible and to diminish the fluid intake. The cardinal sign, hyponatremia, responds to the withdrawal of fluids from the patient's intake.

Post-traumatic Hyponatremia: Hyponatremia is frequently found immediately after major surgery, general anesthesia or recent exposure to trauma. This syndrome is produced by administration of large amounts of fluids in the immediate post-operative period. The increased secretion of adreno-

cortical hormones following trauma results in increased proximal renal tubular reabsorption of salt and water. In addition, however, there is an increase in secretion of ADH and promoting distal tubular reabsorption of water. Thus, the intravenous fluids given post-operatively are not immediately excreted and dilutional hyponatremia ensues.

The clinical spectrum of post-traumatic hyponatremia may be characterized by two extremes, with intermittent stages: 1) Mild depression of serum sodium (125-135 mEq/L) which is usually overlooked and self-corrective following spontaneous post-operative diuresis of retained water, and 2) Severe hyponatremia (125 mEq/L or lower) most often found in debilitated or chronically ill surgical patients. These individuals frequently harbor compromised cardiac and/or renal function and may exhibit marked exaggeration of post-operative antidiuretic mechanisms. Under these circumstances, the possibility of true sodium depletion must be ruled out and water should be restricted until spontaneous diuresis establishes normal osmotic gradients.

Patients undergoing mitral valve surgery are prone to hyponatremia from congestive heart failure as well as post-traumatic stress. With rare exceptions, the syndrome is due to abnormal water retention rather than true sodium depletion and is most efficaciously minimized by post-operative fluid restriction.⁵

Congestive Heart Failure: Hyponatremia commonly occurs in congestive heart failure and for many years was attributed to mercurial-induced salt depletion. It is now recognized that total body sodium is virtually always increased in the hyponatremia of heart failure and that the syndrome is dilutional in character.⁵ Current investigations have implicated renal, neurohumoral and cellular factors in the pathogenesis.

In congestive heart failure, diminished glomerular filtration rate secondary to decreased cardiac output is usually present. Mineralocorticoid activity is increased. These factors combine to decrease delivery of sodium to the distal tubular segment of the nephron. The resultant marked diminution

*Free water is that portion of excreted water which is solute unobligated. Free water is a term applied to an imaginary fraction of urine representing the difference between the actual volume of urine and the volume the urine would have been if the total urinary solutes had been excreted in an isosmotic urine.

of sodium concentration in the distal tubule impairs free water* generation and the retention of ingested solute-free water potentiates a triad of increasing congestive heart failure, diuretic resistance and progressive dilutional hyponatremia. Hypertonic saline given to these patients results in water passing out of the cells and lowers the tonicity of the hypertonic saline to almost the same level of body fluid tonicity that existed prior to saline administration.⁵ Thus, a *small volume* of administered hypertonic saline is diluted to a *large volume* of isotonic saline by the water shift. This is obviously contraindicated in the edematous decompensated cardiac patient.

Rational therapy of this disorder demands 1) early recognition; 2) judicious use of rest, digitalis, and measures to increase circulatory efficiency, 3) salt and water restriction; and 4) mercurial diuretics. Removal of sodium from the distal tubular urine markedly diminishes the osmolality of the latter and, in the absence of ADH, the osmotically free water so generated is excreted in the form of a dilute urine. The presence of reabsorbable sodium in the distal nephron is therefore a direct determinant of free water generation. Mercurial diuretics augment saluresis chiefly by proximal tubular effects and can enhance free water clearance by increasing sodium delivery to the distal nephron. Chlorthiazide has a potent distal tubular action in addition to the inhibition induced in the proximal tubule and can thereby decrease free water clearance. Accordingly, mercurials should be used preferentially in cardiac hyponatremia, but they are less effective until hyponatremia has been at least partially corrected by water restriction.

Central circulatory congestion diminishes pulsations ("stretch stimuli") of the left atrial wall which are necessary for inhibition of ADH release.⁶ The altered hemodynamics of congestive heart failure could be physiologically misinterpreted as "effective" volume depletion and could augment the action of neurohumoral reflexes influencing water retention through non-osmotic ADH release.

Outward migration of intracellular potassium,⁷ organic or inorganic ions, and cell water could produce hyponatremia by dilution of the extracellular space and initiate

a chain of events characterized by: 1) release of ADH following osmoreceptor cell "shrinking" due to cellular ion and water loss, 2) renal retention of water with subsequent restoration of cellular volume and hydration and 3) final "resetting" of the osmostat mechanism at a lower than normal osmolal value at the expense of hypotonic expansion of the extracellular fluid space.

Hyponatremia is of grave prognostic import in congestive heart failure. However, a gratifying response is frequently attained by a therapeutic program aimed at correction of the fundamental pathophysiological mechanisms productive of hyponatremia in the specific case.

Hepatic Cirrhosis: The cirrhotic liver offers a high resistance to venous drainage from the portal venous circulation with an attendant high portal pressure and fails to synthesize albumin at a rate sufficient to maintain normal colloid osmotic pressure. These factors result in large volumes of ascitic fluid which render "effective" extracellular depletion, which activates ADH release and thereby inducing hyponatremia secondary to water retention. A mechanism which has been previously postulated, whereby circulating ADH is elevated due to decreased hepatic inactivation, has been proven incorrect.¹⁰

Renal Failure: With few exceptions, the majority of the urinary sodium loss in chronic renal diseases is secondary to the osmotic diuresis of concurrent azotemia. Diuretic administration, adaptive glomerulotubular imbalance or specific renal tubular defects may play an ancillary role.⁸ When these urinary sodium losses are not counterbalanced by adequate oral salt intake, contraction of extracellular volume and further decrements in renal perfusion may be expected. Sodium chloride or sodium bicarbonate administered together with careful monitoring of body weight, urine volume and urinary sodium excretion frequently produces remarkable recovery in this type of patient.

Dilutional hyponatremia in the course of acute renal insufficiency is virtually always due to iatrogenic overhydration. The endogenous synthesis of water by catabolism of body fat may attain quantitative signifi-

cance during anuria. For this reason, body weight as well as intake-output records should be used as a reference for fluid administration.

Nephrotic Syndrome: The lowered serum albumin due to renal loss results in diminished "effective" extracellular volume. The volume receptors ("stretch receptors") and consequent ADH release results in preferential water retention and hyponatremia.

Metabolic Alkalosis: In metabolic alkalosis, the renal tubular intracellular potassium concentration is higher relative to hydrogen concentration and potassium, in preference to hydrogen ion, is exchanged for sodium by the distal renal tubule. Excessive amounts of potassium are excreted into the urine and potassium depletion ensues, as cellular potassium concentration decreases, the potassium is replaced by sodium and hydrogen, resulting in hyponatremia. The treatment of this condition hinges on the correction of the hypokalemia and the alkalosis.

True Sodium Depletion Hyponatremia: True salt depletion hyponatremia is encountered clinically whenever losses of body sodium exceed losses of body water. It is characterized by relative overhydration of a diminished total body electrolyte pool. During the genesis of this form of hyponatremia, well over half of ingested salt-free water is osmotically obligated to the intracellular space, so that sodium deficits are always relatively greater than those of water. For this reason, sodium replacement should be calculated on the basis of total body water and gradually replaced by a hypertonic solution.⁵ This permits gradual shifting of intracellular water into the extracellular space and therefore unifies recompensation of extracellular volume with correction of previous intracellular overhydration. Isotonic solutions supply greater amounts of water than are necessary per unit of sodium and are theoretically hazardous in these patients.

Diuretic-induced Hyponatremia: Diuretic-induced hyponatremia is the most misunderstood of clinical hyponatremic syndromes and deserves special emphasis. The pharmacologic action of thiazide and mercurial diuretics on the renal tubular cells results in isosmotic urinary sodium excretion. Neither drug can induce renal conservation

of water during sodium diuresis; that is, produce hyponatremia by selective urinary loss of sodium without water. Since these drugs cannot *per se* elevate urine to plasma osmolal concentration ratios above unity, hyponatremia developing during diuretic administration requires the coincident interaction of an additional physiological mechanism (or derangement) and is not directly attributable to the renal action of these agents. There are four separable types of hyponatremia associated with diuretic compounds:⁵

(1) Hyponatremia due to potassium depletion: The intracellular potassium which is lost as the body develops a potassium depletion is replaced in the cells by sodium and hydrogen ions. The potassium depletion then results in hyponatremia as the sodium enters the cells.

(2) Water loading during thiazide administration: Thiazide compounds can diminish the rate of maximal free water generation by virtue of their significant distal tubular inhibition of sodium reabsorption. Consequently, thiazide derivatives may precipitate acute hyponatremia when given to patients prone to ingest large volumes of water over short periods; such as, in psychogenic polydipsia, urinary calculi prophylaxis, etc. For a similar reason, intravenous dextrose in water solutions should be infused gradually when patients are simultaneously receiving thiazide drugs.

(3) Alteration of "effective" extracellular volume: Retention of sodium to expand the extracellular space is a fundamental biologic mechanism designed to effect rapid changes in extracellular volume in accord with varying functional needs. This endows a potentially static body fluid compartment with dynamic qualities connoted in the term "effective" extracellular fluid volume. Derangements in the factors controlling body fluids in cardiac, hepatic or renal disease may culminate in a requirement for "effective" extracellular fluid volume greatly in excess of recognized values in normal individuals. "Effective" hypovolemia or relative hypovolemia is physiologically compatible in the form of ascites, edema and pulmonary congestion. If the physician fails to recognize the necessity of orienting therapy to remedy the underlying disease state respon-

sible for producing edema, aggressive diuretic programs are invariably followed by immediate post-diuresis renal sodium conservation. This in all likelihood represents a homeostatic reaction aimed to replenish the volume of "effective" extracellular fluid lost by the previous drug-induced saluresis. When sodium restriction or continued diuretic administration preclude this rebound antinatriuresis, preferential retention of water on the basis of volume dependent ADH release may lead to severe dilutional hyponatremia.

In addition, elderly people *without* evident cardiac, hepatic or renal disease may be extremely sensitive to very small drug-induced depletions in the extracellular fluid compartment and develop acute hyponatremia due to water retention by ADH.⁹

(4) Extrarenal thiazide-induced hyponatremia: Thiazides may produce hyponatremia via an extra-renal mechanism without characteristic changes in net external sodium and water balances.⁹ It is postulated that chlorthiazide may induce a shift of sodium from the extracellular to intracellular compartment of a magnitude sufficient to initiate volume-controlled ADH release.

Adrenocortical Insufficiency: In Addison's disease, hyponatremia develops as sodium is lost in the urine and maintained by a defect in the excretion of free water. The loss of sodium is clearly a result of the insufficiency of sodium-retaining steroids and can be prevented by administration of desoxycorticosterone acetate or aldosterone.

The defect in free water clearance is the result of deficiency in aldosterone and excessive reabsorption of free water. Aldosterone affects free water formation in the distal convoluted tubule. The distal convoluted tubule is more permeable than normal to water due to absence of carbohydrate-active steroids. The acute withdrawal of exogenous steroids may produce an acute adrenocortical insufficiency.

Thyroid Deficiency: Hyponatremia may be found in association with primary hypothyroidism and is frequently severe in myxedema coma. Obtunded water diuresis is present in myxedema with resultant dilutional hyponatremia. Sodium diuresis follows thyroxine replacement; presumably the effect is mediated via restoration of the di-

inished glomerular filtration rate and renal perfusion noted in this disease. Inappropriate antidiuretic hormone release may play a part, as may the interstitial cationic-binding hyaluronic acid macromolecules in the hyponatremia of myxedema.

Osmotic Diuresis: An osmotic diuretic holds sodium and water in the tubule lumen preventing reabsorption and results in sodium excretion in the urine. Effective osmotic diuretics include the glycosuria of diabetes mellitus, the ketones of uncontrolled diabetes mellitus, urea as present in uremia and exogenous osmotic diuretics as mannitol.

Others: Hyponatremia may result from the loss of sodium from the gastrointestinal tract, such as may occur in diarrhea, vomiting, nasogastric suctioning, fistulae, etc. Significant sodium loss may also result from skin lesions, especially in severe burns, but

also excess sweating or weeping dermatologic lesions. The sequestration of sodium in the body, such as in urticaria, pleural or peritoneal effusions, etc., may be of significant magnitude to produce hyponatremia.

Asymptomatic Hyponatremia: Asymptomatic hyponatremia has been noted in several clinical states, with the following characteristics: 1) Maintenance of hyponatremia over a wide range of sodium intakes, 2) transient ability to retain an acute intravenous sodium load followed by saluresis and return to hyponatremia, 3) absence of adrenal, renal or cardiac abnormalities and 4) absence of the symptoms usually associated with salt depletion. The osmoreceptor response has been demonstrated to be qualitatively normal though established around a lower-than-normal baseline level of extracellular fluid osmolality. A primary *diminution* in cellular osmolality secondary to cachexia has been postulated.

TABLE 1.

PRIMARY WATER EXCESS		SODIUM DEPLETION	
Historical			
1. Weight gain		1. Weight loss	
2. Decreased sweating		2. \pm sweating	
3. Blurred vision, nausea and vomiting		3. Giddy, vertigo, syncope	
4. Muscle cramps		4. Muscle cramps	
5. Headache		5. Headache, improved supine	
6. Often thirsty		6. Absent thirst	
Physical			
1. Usually normotensive or sl. hypertensive		1. Postural syncope	
2. Often signs of inc. intracranial pressure projectile vomiting		2. Soft eyeballs, usually decrease intracranial pressure	
3. Fingerprinting, good turgor		3. Loss of skin turgor	
4. Normal or high venous pressure		4. Veins fill slowly	
5. Usually normal temperature		5. Low body temperature	
6. Bradycardia usually		6. Tachycardia usually	
Laboratory			
1. Often high urine sodium excretion		1. Low urine sodium unless adrenal or renal disease	
2. Absent urine casts (unless renal disease)		2. Casts present	
3. GFR usually high (unless renal disease)		3. GFR low	
4. Hematocrit may be low		4. Hematocrit high	
5. Low TSP		5. High TSP	
6. BUN usually low (unless renal disease)		6. BUN high	
7. Normal or high sodium space		7. Low sodium space	
8. High blood volume, esp. Pl. Vol.		8. Low blood vol., esp. Pl. Vol.	
9. Serum Osm and Na low		9. Serum Osm and Na sl. low or normal	
10. High salivary Na/K ratio		10. Low salivary Na/K ratio unless adrenal disease	
11. Ketones usually not in urine		11. Ketones usually present	

Differentiation of Water Excess Versus Sodium Depletion: The diagnosis of either primary water excess of sodium and water excess may be evident from the history. The correct diagnosis, however, can be extremely difficult. Table I lists the more important diagnostic features in this differential diagnosis.

The history of weight changes, thirst and gastrointestinal symptoms are useful differential points. The ability to see fingerprint ridges for one minute after pressing a finger firmly on the forehead for a few seconds is indicative of intracellular edema.

Laboratory measurements of 24-hour sodium excretion, hematocrit, total serum proteins and blood urea nitrogen will usually differentiate water excess from sodium depletion. The measurement of glomerular filtration rate, sodium space, blood volumes and salivary sodium-potassium ratios are often useful.

The measurement of plasma and urine osmolalities is a simple test if the equipment is available and will establish the diagnosis of hyposmolality and hyponatremia. If the plasma osmolality is lower than the normal of 290 ± 10 mOsm/Kg., then 12-hour weights, blood volume, sodium content of all body losses and assessment of renal function should be instituted.

In conclusion, the four requirements² for the rapid excretion of water in excess of solute are reiterated, since in the final analysis this is the only device the body has

to prevent the development of hyponatremia. The ability to form a dilute urine and to excrete water with sufficient speed to maintain a normal osmotic pressure in the face of large intakes of fluid depends upon (1) the filtration rate, (2) volume flow to the Loops of Henle and the distal convoluted tubule, (3) the reabsorption of sodium and anion in this area with resultant freeing of water and (4) the permeability of the tubule membrane to water in the diluting area. This last is a function of the intact hypothalamico-hypophyseal system. Most, if not all, cases of hyponatremia may be considered as the result of a disturbance in one or more of these four factors. □

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800 N.E. 13th Street, Oklahoma City, Oklahoma

POSTGRADUATE COURSE ON IMMUNOLOGY AND TRANSPLANTATION IN APRIL

A postgraduate course—"Immunology and Transplantation"—developed by the Department of Pediatrics will be held at the Children's Memorial Hospital, University of Oklahoma Medical Center, Oklahoma City, on April 29th and 30th, 1964.

Guest speakers include Robert A. Good, M.D., Department of Pediatrics, University of Minnesota School of Medicine, Minneapolis, Minnesota; Frank J. Dixon, Jr., Scripps Clinic and Research Foundation, La Jolla, California; and Douglas C. Heiner, M.D., Department of Pediatrics, University of Utah School of Medicine, Salt Lake City, Utah.

Further details may be obtained from the Postgraduate Office, University of Oklahoma Medical Center, 800 N.E. 13th Street, Oklahoma City. □

Dean's Message

The number of applicants for admission to the University of Oklahoma School of Medicine next fall is nearly twice that of four years ago, hopefully indicating a reversal of the trend that has concerned doctors over the nation in recent years.

At the close of the filing period in December, a total of 498 applications had been received by the Board of Admissions in contrast to approximately 250 who sought admission to the class entering in 1961. The period for accepting applications opens July 1st and the Board of Admissions begins interviews in October. Selection of the class is completed in March.

Nationally, the AMA Council on Medical Education reported the first upswing in six years, a ten per cent increase, for the 1962-63 semesters.

Applications to our school have climbed steadily since 1960-61, rising to 380 in 1961-62 and to grand total of 446 last year. Concurrently, there has been a consistent gain in the number of candidates from out-of-state and, in fact, the only increase this year over last was in the non-resident category. There were 284 in-state applicants, one less than the prior year, while applications from non-residents showed an increase of 53. However, since under present regulations no

more than ten per cent of each class can be selected from out-of-state, this added little to the potential of the next entering class.

Speculation as to why the decline in applicants has been halted should take into account the increase in population and in undergraduate enrollments. The war babies are now reaching medical school admission age.

However, we believe an important factor in the increased number of in-state applications is the determined effort Oklahoma physicians and their wives have made during these same years to encourage able young people to consider careers in medicine and related fields. The competition from other disciplines continues, nor has there been any decrease in the cost of medical education or in the long period of training required, often cited as deterrents to attracting qualified students into medicine. It would appear that the time spent in counseling with high school and college youth and the money contributed to the Oklahoma State Medical Association scholarship and loan fund program are already paying dividends. Inquiries from prospective applicants indicate that the latter program has given encouragement to some promising students who otherwise would have felt they were financially unable to seek a medical education.

Mark R. Everett

OSMA Conference Launches New Medicare Campaign

A project designed to produce thousands of anti-Medicare letters to Washington was announced to medical organization leaders at the recent OSMA County Officers Conference in Oklahoma City.

Doctor Rex Kenyon, Chairman of the Council on Public Policy, terms the project "Operation — Waiting Room," to coincide with the AMA's grass roots public information program, "Operation Hometown."

Where the AMA program calls for a broad base of operations at the county medical society level, the OSMA project is staged in the physician's waiting room and is aimed directly at the goal of producing a large volume of mail to Oklahoma's Congressmen and Senators.

"Operation—Waiting Room" consists of an 18" x 23" poster for every physician's reception room and a new OSMA folder entitled "Take A Look At Medicare." The poster message contains general arguments against the Medicare Bill and an appeal for the reader to study the folder, then express his written opposition to the U.S. Congressman from his district and to both Oklahoma Senators.

In the folder—which fits conveniently into a pocket on the face of the poster—the reader will find specific objections to the legislation, local facts and figures as to costs and need, and letter-writing instructions.

Letter-Writing Station

All OSMA members are being furnished with one poster and an initial supply of 100 folders. The Council on Public Policy is requesting the establishment of a letter-writing station in every reception room. It is suggested that doctors set up the

poster display on a table or counter top and furnish ball point pens and writing materials (post cards and/or blank stationary).

Council Chairman Kenyon further suggests that "Operation—Waiting Room" be given the personal touch by physicians and their office personnel.

"Human nature what it is," Kenyon said, "many of our non-medical friends cannot be sufficiently motivated by printed matter to write their elected representatives in Washington—it will take a personal request by the doctor or his receptionist.

"The poster and folder will supply the basic information necessary to write a short note of opposition to Medicare—the writing materials and ball point pens will make it convenient for the prospective writer—and the motivation can be accomplished by personally asking each patient to take a few minutes to review the information and register written opposition."

Physicians are also being asked to mail the correspondence for their respondents. However, it is not recommended that post cards be pre-addressed.

Goal: 10,000 Per Day

If every physician in the state will cooperate on "Operation—Waiting Room," and produce the nominal number of five letters or post cards per day, a statewide volume of ten thousands letters per day will be attained!

Oklahoma's congressional delegation, regardless of personal views or political commitments, will obviously be influenced by the weight of such a tremendous response.

Doctor Kenyon urges all state phy-

sicians to take Medicare very seriously during the months ahead.

"The House Ways and Means Committee has completed public hearings on the bill (H.R. 3920) for this session of Congress," Kenyon said, "and is scheduled to vote on the measure sometime in March.

"Unless millions of Americans express their views to their elected representatives now and continue to do so throughout the legislative session, there is the very real and strong possibility that compulsory social security medicine will be enacted into law—and it will be too late then for the medical profession to get concerned."

AMA Program Pushed

The Council on Public Policy has not abandoned the AMA's "Operation Hometown" program, but is simply offering the poster display as a convenient and effective adjunct to the more comprehensive AMA project.

"Operation Hometown" kits are being mailed to the legislative committee chairmen of all county medical societies for "full and immediate implementation."

The Medicare battle is on for election year 1964—and now is the time for organized medicine's finest effort! "The central offices of the OSMA and the AMA cannot do the job alone," Doctor Kenyon said. "It must be every physician's fight if we hope to win."

Order Folders from OSMA

Quantities of the OSMA folder, "Take A Look At Medicare" are available at cost from the OSMA, Box 18696, Oklahoma City. The price is \$1.00 per 100 folders, shipped prepaid. □

Officers, Mental Health Meetings Attract 250

The 1964 County Officers Conference registered 150 OSMA physicians and wives—and the First OSMA Mental Health Conference attracted 100 registrants—making the weekend of January 25th-26th a memorable occasion in the history of the Oklahoma State Medical Association.

Registration for this year's county officers meeting was double that of the first OSMA effort in 1962. An all-star cast of speakers enlightened county medical society leaders on such subjects as medical school relationships, federal legislative and political activities, the Kerr-Mills program in Oklahoma, the interrelationship of medicine and religion in the treatment of the whole man, and the responsibilities of citizenship and medical society leadership.

The appearance of U.S. Congressman Durward G. Hall, M.D., highlighted the program. A Missouri Republican, Doctor Hall gave up his surgical practice for politics. At the noon luncheon on January 25th, he delivered an inspirational address concerning the state of the nation and the need for greater physician activity in government affairs.

Other visiting guest speakers included Aubrey D. Gates, Director of the AMA's Field Service Division,

James B. Foristel, AMA Lobbyist, William R. DeMougeot, Ph.D., Texas debate coach, Honorable J. D. McCarty, Speaker of the Oklahoma House of Representatives, Fred W. Eberlein, AMA Department of Medicine and Religion, and Hoyt D. Gardner, M.D., Chairman of the Kentucky Medical Political Action Committee.

Mr. Lloyd E. Rader, Director of the Department of Public Welfare, was also scheduled to appear on the program, but at program time was represented by a member of his staff.

OSMA's County Officers Conference will be continued as an annual event designed to brief newly-elected county officers on some of the key issues and projects confronting organized medicine.

Mental Health Meeting

Doctor George Guthrey's Mental Health Committee conducted the statewide Conference on Mental Health the following day, January 26th.

Howard Rome, M.D., Mayo Clinic psychiatrist, headed a program designed to form guidelines for future OSMA mental health policies. Conference participants were given background information and then had the opportunity to formulate section reports in eight key areas of the overall mental health program. The

reports will be used by the Mental Health Committee in drafting policy recommendations for the annual meeting of the House of Delegates next May. □

Participation in Regional Postgraduate Courses Shows Gain Over 1963's

With three Regional Postgraduate Educational Courses now completed and five remaining to be held, physician participation in at least the first two courses conducted showed a substantial gain in total registration over the first two courses held a year ago.

During January of this year, regional courses were conducted in Ada and Altus with a registration of 30 and 44 physicians respectively. In January, 1963, courses were held in McAlester and Ponca City. The total combined registration for the two meetings netted 55 participants. Therefore, participation in this year's Regional Postgraduate Educational Courses shows a registration increase of 19 physicians or 34.5 per cent as compared to the same time a year ago.

The third course is scheduled for the Hotel Lawtonian in Lawton on February 18th. In the past, physicians in the Lawton area have supported the programs extremely well, and a record turnout for the February meeting can be anticipated from early advanced reservations.

Four Courses to Go

While two Regional Postgraduate Educational Courses are completed, and the Lawton meeting is now on tap, four others remain to be conducted. The next course is scheduled for February 25th in Bartlesville. The subject for the February 25th regional meeting will be "The Heart."

In addition, the following regional postgraduate meetings are to be conducted on the following dates, with the corresponding subject offered and at the location indicated:
March 24—"The Central Nervous System"—Texhoma Lodge.



Over one hundred physicians and wives attended the January 25th luncheon program to hear U.S. Congressman Durward G. Hall, M.D., Springfield, Missouri.

March 31—"The Central Nervous System"—Woodward.

April 21—"The Colon"—Enid.

April 28—"The Pancreas"—Miami.

Program timing as well as the decentralized meeting sites are factors in keeping with the general purpose of the activity—which is to bring high quality scientific meetings to the doorstep of the practicing physician with a minimum infringement on office hours.

The remaining five programs will begin at 4:30 p.m. with two hours of lecture followed by dinner and another two-hour period of lecture and discussion. A registration fee of \$7.50 covers dinner and the scientific program.

Courses Open to OSMA Members

According to R. R. Hannas, M.D., Chairman of the Council on Professional Education, any member of the Oklahoma State Medical Association may attend any of the offered courses. Moreover, the chairman pointed out that pre-registration may be made at the OSMA Executive Office for any of the remaining courses by mailing a check in the amount of \$7.50 and designating the location where the preferred course is being held.

Doctor Hannas noted, however, that physicians living in counties within a reasonable distance from a course site, would be sent a notice containing a registration form approximately three weeks prior to meeting in their area.

Television Programs Underway

A series of eleven one-night-a-week televised Postgraduate Medical Education Programs was launched on January 6th.

Beginning with the program televised January 6th, followed by the February 13th production, nine programs can still be seen by Oklahoma physicians. From February 20th through April 16th, Oklahoma physicians can conveniently tune their TV sets to either channel 11,

KOED-TV, Tulsa, or channel 13, KETA-TV, Norman and view the variety of medical education topics offered every Thursday evening, beginning at 9:35 p.m.

The televised Postgraduate Medical Education Programs are sponsored by the Oklahoma State Medical Association, through its Council on Professional Education, and the Department of Postgraduate Education of the University of Oklahoma Medical Center. Cost for underwriting the series is borne by the OSMA.

On the following dates, the corresponding medical education subjects will be presented on channels 11 and 13 for Oklahoma physicians' review:

February 20—"Clinical Aspects of Emphysema"

February 27—"Toxemia of Pregnancy"

March 5—"Pyelonephritis"

March 12—"The Nephrotic Syndrome"

March 19—"Aspirin Poisoning in Children"

March 26—"Radiology in Health and Disease—Part I"

April 2—"Radiology in Health and Disease—Part II"

April 9—"Management of Congenital Heart Disease"

April 16—"Gynecology" ☐

Oklahoma Chapter of ACS Will Meet in February

The annual rotating clinical meeting of the Oklahoma Chapter, American College of Surgeons, will be held at 2 p.m., February 29, in the University of Oklahoma School of Medicine auditorium. All members of the Oklahoma State Medical Association are invited, Hays R. Yandell, M.D., Tulsa, chapter president, announced. The clinical program will be followed by cocktails and dinner at 6:30 p.m. at the Oklahoma City Golf and Country Club. Admission will be by ticket only. ☐

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Pontotoc Society Inaugurates Annual Postgraduate Course

The "First Annual Symposia on Selected Subjects" will be inaugurated on March 13th and 14th by the Pontotoc County Medical Society.

Slated for the Oak Hills Golf and Country Club in Ada, the meeting will feature Friday afternoon and Saturday morning scientific sessions, a Friday evening social hour, dinner and program of entertainment, and special activities for physicians' wives during the scientific program periods.

All members of the Oklahoma State Medical Association and their wives are invited to attend the meeting as guests of the Pontotoc County physicians. There will be no registration fee or charge for dinner. Also, physicians in northern Texas are being asked to attend the meeting which is planned as an annual event.

Program Outlined

Registration will be conducted from 10:00 a.m. until 1:00 p.m. on March 13th at the Oak Hills club house.

The scientific program for Friday afternoon—which begins at 1:00 p.m. and concludes at 5:30 p.m.—will feature discussions on: "Oral Therapy in Diabetes—A Perspective"—John A. Galloway, M.D., Medical Research Division of Eli Lilly; "Modern Concepts in the Control of Hypertension"—W. Arthur Staub, M.D., Ciba Pharmaceutical Company; "Alcoholism"—Bruce H. Medd, M.D., Roche Laboratories; "Research Aspects of Heparin"—Leon Freeman, Ph.D., Riker Laboratories; "Endocrine Control of Renal Function"—Robert T. Manning, M.D., Assistant Professor of Medicine, University of Kansas; "Respiratory Problems in General Practice"—T. J. Ormsby, M.D., E. R. Squibb and Sons; "Pediatric Urology"—Alexander Keller Doss, M.D., Ft. Worth, Texas.

On Saturday morning, from 8:30 a.m. until 12:30 p.m., the program will consist of: "Recent Advances

in Insulin and Insulin Therapy"—Doctor Galloway; "Hypertension"—Doctor Staub; "Sulfonamides"—Doctor Medd; "Clinical Uses of Heparin"—Doctor Freeman. "Renal Function"—Doctor Manning; "Newer Penicillins"—Doctor Ormsby; "Pediatric Urology"—Doctor Doss.

The Friday evening social hour will begin at 6:30 p.m., followed by a buffet dinner and entertainment.

Excellent housing accommodations are available in Ada, and reservations should be made by contacting the Aldridge Hotel, the Indian Hills Motel, or the Trails Motel. □

Delegates' Speaker Requests Volunteers And Resolutions

The Speaker of the OSMA House of Delegates, Marshall O. Hart, M.D., Tulsa, has issued a reminder to Delegates and all other members of the association concerning the planning and conduct of the annual House of Delegates session, which is scheduled for May 1st and 2nd, in Oklahoma City.

First, he has requested the early reporting of county medical society delegates and alternate delegates in order to expedite the appointment of the committees necessary to conduct the meeting properly. Newly-elected county representatives should be reported at once to the OSMA headquarters, Box 18696, Oklahoma City.

Doctor Hart also urges all delegates who are interested in volunteering for service on a Reference Committee to contact him soon and make their preferences known. "Reference committee work is difficult and requires dedication," Hart said, "and an interested volunteer will undoubtedly serve better than a draftee."

He also reminds the entire membership of the OSMA that they are not only welcome but are earnestly solicited to attend the Reference Committee hearings, which will take place on the late afternoon and evening of Friday, May 1st, following

the opening general session of the House of Delegates. Policy matters presented to the House in the opening session will be referred to the committees for recommendation prior to taking final action on Saturday morning.

"During Reference Committee hearings, any member of the association—delegate or not—may express his views on the policy items under consideration," Doctor Hart explained.

"I also hope that many non-delegate members will audit the general sessions of the House of Delegates to acquaint themselves with the activities of the legislative branch of the OSMA."

Call For Resolutions

Much of the policy-making of the association is brought about through the introduction of resolutions. Resolutions may be initiated by any member of the association, but are most often drafted by action of a county medical society. County resolutions must bear the signature of the county medical society secretary, and individual resolutions must be signed by their authors.

All resolutions are required to be filed with the OSMA Executive Office at least thirty days prior to the convening of the House of Delegates. For the 1964 meeting, no resolutions can be accepted after March 31st, except with the approval of the OSMA Board of Trustees.

Doctor Hart advises county medical societies and individual members that the OSMA Resolutions Committee, c/o OSMA Executive Office, will assist in drafting resolutions or in providing reference materials.

Criticism Invited

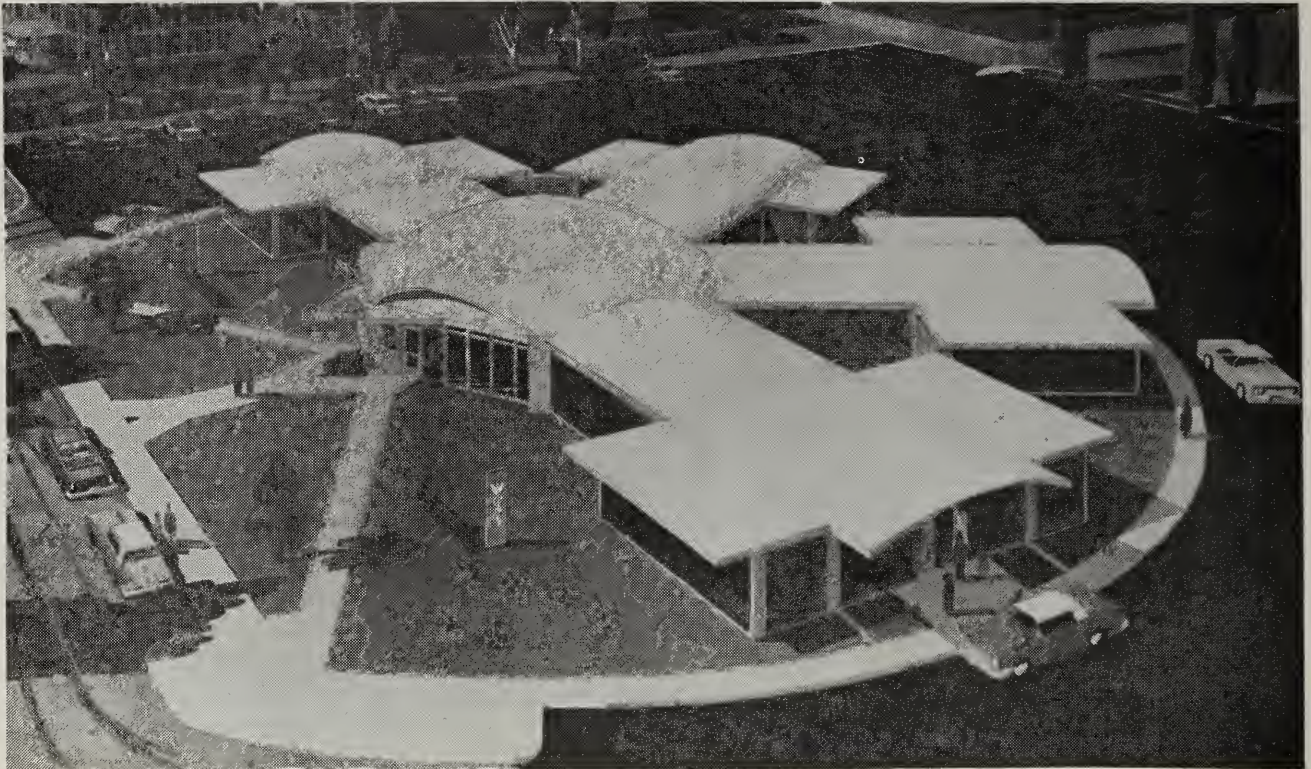
Doctor Hart invites "any constructive criticism of the House of Delegates meeting which will lead to improvement.

"The operation of the meeting is far from perfection," Hart said, "and I know we will never please everyone. But, to the best of my ability,

(Continued on Page 79)

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SPEAKER . . .

(Continued from Page 77)

the meeting will be conducted fairly and justly with equality for all and with special privilege for none."

Credentials cards will be mailed from the OSMA office to all elected and certified delegates before April 1st. In the event a delegate cannot attend the meeting due to some emergency situation, he signs the card over to his alternate delegate. County society officers should make certain that their electorates are fully represented at the policy-making meeting. □

THE RESPONSIBILITY . . .

(Continued from Page 49)

leaders "by act of Congress" were a far cry from being ideal leaders. History teaches us that the leaders of the past had consciously, or unconsciously, followed the rule of Abe Lincoln when he said, "I shall study and learn so that when the time comes I shall be ready." If a one or two word definition were required it would surely consist of "knowledge" and "foresight."

How has our profession fared in those elements? If we think only in terms of scientific achievements, we are safe. The advances made in the past generation of time overshadow all advancements of history in medical science. In that field we are unquestioned and unchallenged.

If, however, we think in terms of how well our profession has fared in keeping abreast of the equally vast changes in the socio-economic affairs, I fear that we are still staring the old mules in the rear! Many, if not most, of these changes that have to do with our profession are direct, or indirect results of our own advancements in the science of medicine. We have been so absorbed in these achievements, and have become entirely too smug in thinking that such progress would so endear us to the people that they could and would have no part in our undoing, that we have not taken the time and

interest to look at the changes in the world outside of our remarkable advancements. We have forgotten that there can be no action without some reaction. Basic physics teaches us that if we push against that wall, that the wall exerts an equal force against us, up to the limits of its strength. Once that limit is overcome and the wall gives way, no one here would doubt but that there would be some reaction!

Permit me to review some of the "reactions" that have occurred, both directly and indirectly, as a result of our own brilliance and that of our fellow scientists in other fields:

—New drugs were made, in themselves expensive, and new processes of utilization followed.

—The "country physician," including me, stopped practicing out of the little black bag and moved into offices and hospitals.

—Hospitals became places to live, rather than places to die, as had been the previous concept, all too often.

—Early ambulation of surgical patients took them off the bed-pans and created demands for more toilet facilities, as well as many other changes in hospital structures.

—Far more laboratories were needed to diagnose and control the usage of the new drugs and devices.

—Atomic advances brought forth demands for new facilities.

—More, plus new types, of technicians and workers were needed and the training facilities were expanded, though still far short of needs.

—Life was lengthened. Weaklings are being kept alive, only to demand more help and devices to continue their miserable lives.

—The old leaders of the cause of death were replaced by new ones, that created demands for their alleviation.

—People were caught up in the excitement of the new developments and became smart in their own right, and demanded ways and means of having for themselves

some of the results of these advancements — and why shouldn't they?

—And they appealed for help, and all too often, we who could see so well and hear so clearly, neither saw nor heard their appeals.

—In our land the people rule, and their cries became the cries of the lawmakers, and so laws were proposed—and passed.

—And finally, we the profession, began to see that things are being done that are detrimental to all that we have accomplished in the past. Those whom we have served so well, seemingly having turned their backs upon us—their benefactors—and are attempting to make rules and regulations that we know will destroy the very goose that laid the golden egg.

—And now we scurry hither and yon, crying that we are being double-crossed! We have created our own Frankenstein! The public is trying to control him.

Of course, the above listing is oversimplified, as many other factors have contributed to the picture, but the basic facts of our own shortcomings must not be overlooked. So where do we go from here?

I believe that the people have always wanted and expected the profession to guide them in their efforts to secure these "blessings of liberty" for themselves. The reactions have been but the natural result of nature attempting to fill a vacuum. We have broken all sound barriers with the speed of our accomplishments, and have gotten so far ahead that we were not able to hear the "sonic boom" that followed. And now that ride is over, we find our windows broken, and we try to blame it all on the neighborhood delinquents! Many things have transpired while we have been on this supersonic scientific splurge—things that are different than before—things that will never be the same again. We, ourselves, must do some adjusting to the changes. "The moving finger writes, and having writ, moves on."

It is more than significant that some 150,000,000 people are now covered by some form of voluntary health insurance. Did they take that coverage out because we, the profession, told them to? Have we done our part to encourage them to do so? This, in my way of thinking, is one of the most important bits of tangible evidence available, that people are going to demand help in meeting their bills, and will secure such help. We can no longer fail to heed those demands. We can cry all we wish about some of the evils that go with third parties, but we all know that there is one third party whose evils will multiply ten-fold.

It is significant that our medical school enrollments have increased 38 per cent during the past 15 years, but to keep the present ratio of physicians to population, it will need to increase 50 per cent by 1975. We dare not overlook the fact that expenditures for medical schools for the past 15 years have increased by 630 per cent. Not the least significant fact is that today Federal funds provide 46 per cent of this total expenditure, which exceeds that provided by State and local funds; and that Federal grants for research now amount to 76 per cent of the total in our medical schools. Add to these the fact that the number of interns and residents have increased by 167 per cent in 15 years, a fact that reflects upon the output of family practitioners, and the trend becomes unmistakable. Can we imagine for an instant that the public is not going to be involved, and that somewhere down the road they will not again start methods to "fill the vacuum?"

George Bugbee, Director of Health Information Foundation and Chairman of the Joint Committee of the American Hospital Association and the Public Health Service on Area-wide Planning of Hospitals and Related Health Facilities says: "Those who contemplate the future of medical practice cannot but be con-

cerned with the many critical problems to be faced, a most consequential one, for the consumer, being a sufficient number of physicians properly trained and willing to act as family medical counselors. This is particularly important with an aging population suffering over the years with chronic illness." The public is not asleep.

This same Bugbee, whose name is used as "the Bugbee Report on Areawide Hospital Planning" is being heard in many fields. We have properly stated our objections to this plan, and rightly so, because it contains many vicious implications, but we have not given solutions to the problems which implemented the study and the report. As a specific example, may I remind you that each year officials in the State Health Department receive \$3,500,000 from the Hill-Burton funds to be expended for hospital construction. Those charged with the proper utilization of these funds do not like what they see in the Bugbee report any better than we do. They want—and need—our help in devising plans for the proper utilization of these funds. What shall be our answer? Shall we neglect them and force them to use the only presently available proposal for their use?

Nor can we disregard the implications attendant upon all of the activities in mental health. We know that proposals are to be made, laws proposed and passed, many facilities asked for and received. Demands will be enormous for personnel. Can our profession afford to sit by and permit these things to happen without our guidance and leadership?

The crux of the problems of medical leadership is not in the ignorance of the leaders, but the misapprehensions, misunderstandings, and apathy of the followers and the individual practitioners. There are many of our profession who have made many studies and have been crying vainly for action for many years, but their efforts have been thwarted by the inactivity of the membership. But even then our knowledge of the impli-

cations of the actions and reactions is woefully lacking in many of the fields.

Can we say what lies ahead? Can we, as a profession, project ourselves ahead to a realistic appraisal of the needs of the next generation? To give adequate leadership for the future, attempts must be made to do just that. In the meantime we must be extremely busy just catching up with events that have transpired and are now operative. It must become a part of every physician's life to apprise himself of just what our status is today. Instead, far too many are still crying about the losses that have already gone down the drain. Too many of us are wasting our efforts, not on the main problems, but at the unsightly minor failures within the wrappings. We are more concerned with the minor flaws of an imperfect system than we are with the basic issue of much more fundamental danger.

No leader can go so far and so fast as to lose touch with his followers, as he then becomes a lone crusader with no followers. Leadership can progress only so far and so fast as the followers can accept and understand the aims and purposes expressed by the leader. It therefore becomes self-evident, that for the profession to assume leadership in the fields that demand our leadership, the individual members of the profession must themselves do some catching up with the problems at hand. Each individual must become a full fledged citizen and assume his duties and responsibilities. He then can begin to see the demands that are being made for leadership, and begin to get some ideas of the needs and the vacuums.

Each individual, as a man of science, must be willing to objectively assess facts as they exist, and accept methods for improvement in exactly the same manner that he accepts a new drug for an old condition. This seems to be one of the most difficult things for physicians to do. They willingly accept a new method of scientific treatment, but

rebel with the mere mention of a new approach to socio-economic affairs. I am sure it is basically because we understand medicine and do not understand socio-economic affairs. I wish I did. I am sure that we had better begin to understand them!

Have we moved too far, and too fast? Should we halt all scientific advances until we can catch up with the socio-economic changes that have been produced? Can we afford to continue in the operation of our Frankenstein with no thought to the effects that he is having upon the lives of our patients? Can we, as individual practitioners, continue to examine patients and prescribe treatments with no regard to the cost? I say once more, as I have said in every district in the State of Oklahoma, the time has come when every physician must pay as much attention to these things as he does to his science. I repeat to you, that the practice of medicine no longer consists only of examination and treatment—it now and will continue to be this—plus being a citizen and aiding in the solutions of these socio-economic affairs.

Many of these problems that I have touched on, and many others now and to come, are quite distasteful and foreign to us. Be assured that if you think the problem itself is distasteful, the answer that might result can be very much more distasteful.

To those of you who are reticent to accept this version and wish to continue to practice only the scientific part, permit me to remind you that if developments continue at the pace they are going and complete socialization and regimentation results, then you will not only be permitted to practice in just that manner, you will be punished if you attempt more. Not only will you be required to practice just your profession, you will be told when, where, how and with no questions, please! Except that the bureaucratic gestapo will not say, "Please." □

DEATHS

WALTER A. HUBER, M.D.
1894-1963

A former Tulsa ophthalmologist, Walter A. Huber, M.D., died in Cheyenne, Wyoming, December 15, 1963.

A 1919 graduate of the University of Oklahoma School of Medicine, Doctor Huber had practiced in Tulsa for 40 years prior to his retirement in 1959. Since then most of his time had been spent in Colorado Springs.

Doctor Huber was presented an Honorary-Life Membership by the Oklahoma State Medical Association in 1960.

HARRY A. HAAS, M.D.
1881-1964

A long-time Sapulpa physician died in Vinita on January 5, 1964.

A native of Montoursville, Pennsylvania, Doctor Haas graduated from the University of Missouri School of Medicine in 1904. Specializing in EENT, he practiced medicine in Sapulpa for 45 years before moving to Disney 12 years ago.

Recognizing his long years of service to the medical profession, Doctor Haas was awarded a Life Membership by the Oklahoma State Medical Association in 1951.

ROBERT O. RYAN, M.D.
1902-1963

Norman physician, 61-year-old Robert O. Ryan, M.D., died December 29, 1963.

Born in Hickory, Indian Territory, in 1902, Doctor Ryan graduated from the University of Oklahoma School of Medicine in 1937. He practiced medicine in both Canton and Fairview before moving to Norman.

Doctor Ryan took an active interest in both medical and civic affairs. He served three terms on Norman's City Commission and served as mayor in 1960-61. □

CLIFTON P. GILLESPIE, M.D.
1887-1963

Clifton P. Gillespie, M.D., 76-year-old psychiatrist, died October 19, 1963.

Born in Buckatunna, Mississippi in 1887, Doctor Gillespie graduated from Mississippi Medical College in 1912. For 25 years he served in the United States Government Indian Service in Oklahoma, Kansas and Nevada. In 1923, he came to Oklahoma City and established his practice in Bethany.

At the time of his death, Doctor Gillespie was with the Central State Hospital in Norman.

GLADYS K. DOLAN, M.D.
1895-1964

Gladys K. Dolan, M.D., 68-year-old Tulsa physician died January 15, 1964.

Born in Meadow Grove, Nebraska, Doctor Dolan graduated from Rush Medical School in 1931. In 1948, she came to Tulsa where for two years she was a member of the Tulsa City-County Health Department staff. From 1954 to 1962, she was on the staff of the Children's Medical Center. The center's auxiliary awarded her a life membership in 1956 and established a perpetual fund in her honor to help needy children.

Doctor Dolan was a member of the Alpha Omega Alpha.

HERMAN FAGIN, M.D.
1900-1964

Herman Fagin, M.D., retired Oklahoma City internist, died February 2, 1964 in Denver, Colorado.

A native of Oklahoma, the 63-year-old physician graduated from the University of Oklahoma School of Medicine in 1923 where he later became Associate Professor of Internal Medicine. □

Miscellaneous Advertisements

WANT ASSOCIATE leading to partnership. Well established Internal Medicine practice, Tulsa. Congeniality as important as ability. Contact Key B, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

SPLENDID opportunity to move right in. Complete office furnishings for sale, including treatment room equipment and reception room furniture, also secretary's desk, etc. and doctor's private office furniture. The office space is available if desired. Contact Key H, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

AVAILABLE July 1, 1964, 1959 graduate of the University of Texas. Residency in Ob-GYN. Contact Joe Don Hughes, M.D., 1128 Winnie, Galveston, Texas.

EXCELLENT clinic site now available. One block west of St. Anthony Hospital, 115 x 190 plus 20 foot alley on three sides. Under \$75,000.00. Creative Brokers, Inc., 2720 Classen Blvd., JA 8-3458. Dawson and Held- enbrand.

FOR SALE: X-Ray Patrician 200 MA with all accessories except motor drive. Attractive, well cared for, and efficient machine, two years old. Discount of 25 per cent off 1961 price. \$1,000 down, will finance balance, including installation, if desired. Contact Key A, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

CLINIC BUILDING for lease, 1250 square feet floor space, air-conditioned. Located Pryor, Oklahoma. Open hospital available. Contact Warren G. Gwartney, M.D., 2570 South Harvard, Tulsa, Oklahoma.

G.P. INTERESTED in general surgery, available for practice October 1, 1964. Graduate of University of Iowa School of Medicine. Medical service completed. Contact William E. Hall, M.D., 1022 Callanan Dr., St. Louis, Missouri.

COMPLETELY EQUIPPED general practice available in Norman, Oklahoma. Office equipment including x-ray and ECG for sale; clinic building for lease; patient records available. Equipment and building available due to unexpected death of Robert Ryan, M.D. If interested, contact Mrs. Robert Ryan, 1017 Jenkins, Norman or Grady Ryan, M.D., Box 97, Lindsay, Oklahoma.

IDEAL opening for young doctor in well established medical clinic, sharing reception room and equipment with three other doctors. Wonderful location on North May Avenue, Oklahoma City. Contact Frank D. Thompson, 3115 N. Pennsylvania, Oklahoma City, JA 5-5700 or JA 4-9552.

GENERAL practitioner, age 34, desires associate general practitioner in South Oklahoma City. Supportive salary and/or percentage until established. Contact Key M, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

AVAILABLE: Specialist Internal Medicine with established Tulsa practice. Desire group or partnership association with five day week in Tulsa. Contact Key L, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

GENERAL PRACTICE group needs additional doctor interested in family practice. Office suite and minor surgical facilities available. Registered laboratory and x-ray technicians, full time business manager and office staff now in operation. New man will have no overhead except rent until his fees are being collected. We offer the luxuries of group practice with the unlimited opportunities of solo practice in a city of 100,000 with no arbitrary restrictions on hospital privileges. Clinic located in large residential area. Address inquiries to University Park Clinic, 4111 Call Field Road, Wichita Falls, Texas.

IMMEDIATE opening for General Practitioner. Practice established. Fine office space available. New hospital open only to M.D.s. Assume practice at no obligation. Contact Norman A. Cotner, M.D., Grove, Oklahoma.

OPENING for general surgeon or general practitioner. Contact James W. Loy, Administrator, The Chickasha Clinic, Chickasha, Oklahoma.

LOCUM TENENS needed for two or three months, beginning February 15th. Would like to accept a call for mission service during this period and need a G.P. to look after my practice. Offer includes comfortable home and office, both rent-free, plus all net proceeds from the practice. Contact A. C. Hirshfield, 908 N.E. 50th, Oklahoma City 5, Oklahoma.

DESIRE location in Ob-Gyn. Board eligible graduate of Wisconsin Medical School, age 34. Contact Russell F. Mading, M.D., 7267 Renda Street, Millington, Tennessee.

Mid-Winter Board Meeting was held January 20th at the Ramada Inn in Oklahoma City. "Mid-Winter Board" has always carried an ominous ring—because the rapidity of our weather changes often causes difficult postponements. At our meeting Doctor Joe L. Duer, President of the Oklahoma State Medical Association, was the featured speaker.

Doctor Duer presented a retrospective summary of accomplishments of the OSMA, together with an examination of our interdependency. In addition, he predicted continued future growth in our working together in fields of legislation and mental health.

Presiding at the coffee table which preceded the board meeting was Mrs. Joseph W. Kelso. Mrs. Tom C. Sparks, State President, welcomed our guests and presided at the meeting. Mrs. W. C. Bradford, President of the first organized Auxiliary, was introduced, along with the following former State Presidents: Mrs. Clifford Bassett, Mrs. Milton L. Berg, Mrs. W. R. Cheatwood, Mrs. Virgil Ray Forester, Mrs. George H. Garrison, Mrs. Joseph W. Kelso, Mrs. James F. McMurry, and Mrs. Neil W. Woodward, Sr.

In the absence of Mrs. Elias Margo, outgoing President of the Auxiliary to the Southern Medical Association, Mrs. Kelso gave an informal report on the annual meeting. Registration for Southern, Mrs. Kelso said, was the highest in the history of the organization. Oklahoma was well-represented and often in the spotlight. Mrs. Margo, of Oklahoma City, presided. Mrs. Forester, our Councilor to Southern the preceding year, served as chairman for the luncheon. The theme, *Music for Medics*, counter-pointing Mrs. Margo's "Sing Along with Southern" theme the past year, was used for the luncheon. Oklahomans attending had reason for feeling lyrical: Tulsa County received the George Feldner Trophy for commemoration of Doctors' Day for the third consecutive year. Muskogee was recognized for the Best Visual Award. Climaxing the meeting, the officers for 1964-65 were installed. Mrs. Forester will serve Southern as Treasurer for the coming year.

A more complete coverage of reports from officers, chairmen, and county presidents will be made in the minutes of the board

meeting and in your next *Sooner Physician's Wife*. Until then, we feel that several outstanding announcements should be reported to you. Our membership has reached 1,308, and our congratulations and gratitude are extended to each officer and member who has worked so assiduously in reaching this all-time high!

Counties reporting 100 per cent membership are: Major, Garfield, Kingfisher, Harper, Beaver, Atoka, Bryan, Carter, Love, Marshall, and Comanche. (These counties are combined in their organization, but are reported separately on a membership quota basis.) For the first time, our Directory is being published jointly with the OSMA *Medical Directory*.

Mrs. J. B. Silman, State Chairman for AMA-ERF, made the report of contributions to date, \$4,251.56. A large donation from East Central (Muskogee, Wagoner, and McIntosh Counties) and continued awareness of the importance of this project promises exciting results at our May meetings.

Much interest is being shown in the new Department of Medicine and Religion of the AMA. We were represented at the first state meeting by Mrs. George Winn. Copies of the pamphlet, previously mentioned on this page, *The Physician, the Clergy, and the Whole Man*, are available either from the state office or from the AMA.

Following the board meeting, a luncheon was held at the Ramada Inn. Mr. Dick West, internationally known Indian artist presented an illustrated lecture on painting and sculpting. Mr. West is an artist himself and an authority on Cheyenne culture, media and interpretation. Doctor Duer, Mrs. Duer, and Mrs. Dick West were guests at the luncheon.

We hope your plans for Doctors' Day are well-formulated. Don't forget to honor your husbands March 30th—and whether your celebration is large or small, have pictures, publicity, favors—anything representative and portable—ready for our State Doctors' Day Chairman, Mrs. Robert E. Dillman. □

A "health cost school" for newspaper editors was conducted by Blue Cross-Blue Shield on February 14th at the Oklahoma Press Association Building, Oklahoma City. Primary aim of the seminar was to enlighten news and editorial writers on major health problems and progress. Rising health care costs, health care for the aged, socialized medicine and voluntary health protection plans were among the subjects discussed. The OSMA was represented by Rex E. Kenyon, M.D., Chairman of the Council on Public Policy. Information packets on the subject of Medicare were presented to the newsmen by the OSMA Executive Office, and Blue Shield also supplied background information on the subject.

Beneficiaries of federal-state assistance reached 6,800,000 persons on June 30, 1963, according to the Department of Health, Education and Welfare, an increase of 285,000 persons over 1962.

Coming—Board Certified Office Assistants. The first certification examinations have been conducted by the American Association of Medical Assistants, and 24 ladies out of a field of 108 emerged with certificates designating them as "Certified Medical Assistants." The certification program is designed to help physician-employers identify those who are qualified as top-level office assistants, and to establish high professional standards for ladies serving as office nurses, medical assistants, medical secretaries, receptionists, etc. Tests are given in five categories, and your girl Friday, if she passes, may become certified as either an Administrative Medical Assistant or a Clinical Medical Assistant.

Charles E. Green, M.D., Lawton pediatrician, served during the month of January as a staff physician on the S.S. Hope in Ecuador, South America. He reports the natives are friendly, except the one who lifted his wallet at a soccer game.

Oklahoma's state sales tax for the first half of the fiscal year totalled \$144.4 million, up nearly four per cent from the year before. In case you don't know, sales tax funds are earmarked for the Department of Public Welfare.

Doctors are being sought for Peace Corps service. GP's, surgeons, pediatricians and gynecologists are needed in the African countries of Togo and Sierra Leone. It's a two-year hitch and pays \$75.00 a month, plus living and travel expenses. Applications may be obtained by writing: Physicians: Division of Recruiting, Peace Corps, Washington 25, D.C.

Workmen's Compensation fees for medical care may be fixed by state law when the 1965 legislature convenes. A similar effort failed during the last session, and the measure is now being studied by a sub-committee of the interim Legislative Council, headed by Representative Mountford of Miami, Oklahoma. Lawmakers are concerned that medical-hospital payments constitute 32 per cent of all funds expended on the program and have observed that medical-hospital costs have risen 96 per cent since 1949 while cash awards to injured workers have only increased by 55 per cent. Oklahoma's workmen's compensation insurance rates are the second highest in the region, exceeded only by Texas.

MEETINGS

- February 29** Rotating Clinical Meeting, American College of Surgeons, OU Medical Center, Oklahoma City
- March 13-14** Seminar, Pontotoc County Medical Society, Oak Hills Country Club, Ada
- March 19-22** PG Course, Gyn. Pathology, Radio-Therapy and Endocrinology, Dept. of OB-GYN, Baylor Univ., Houston
- April 3-4** 16th Annual Midwest Cancer Conference, Hotel Broadview, Wichita, Kansas
- April 6-10** American College of Physicians, Atlantic City, New Jersey
- May 1-3** OSMA Annual Meeting, Skirvin, Oklahoma City

Areawide Planning For Hospitals and Related Health Facilities

RESOLUTIONS Number 23 and Number 7, approved by the House of Delegates of the Oklahoma State Medical Association last year had to do with, respectively, Comprehensive Areawide Community Health Surveys and Areawide Planning for Hospitals. Resolution Number 7 actually resolves, "that the Oklahoma State Medical Association go on record as against Areawide Planning as now being promoted by the American Hospital Association and U.S. Public Health Service." The resolution goes on further to resolve that the OSMA study this program in its appropriate committees with several objectives in mind, one of which would be to "inform the American Hospital Association and the Catholic Hospital Association that organized medicine regards compulsory Areawide Planning in some of its facets as an encroachment upon the private practice of medicine in hospitals."

Just how much study of the program has been carried out by appropriate OSMA committees is quite difficult to ascertain but the transactions and plans of the American Hospital Association and Public Health Service in this regard are fully documented. In a 56 page pamphlet published by the Department of HEW (PHS Service Publication No. 855) July 1961, we are given a joint report from the AHA and PHS. At the time of publication of this report the chairman of the joint committee states, "After more than a year of study and deliberation, the Committee concluded that the urgency of the Nation's hospital and related health facility problems calls for immediate steps to intensify current planning efforts. A local planning agency should be established wherever a substantial planning problem exists. The governing board of each agency should be broadly representative to include community lead-

ers as well as persons knowledgeable in medical care."

This, of course appears to be a bland statement of altruistic intent. But the difficulties of interpretation become obvious when one tries to apply this plan to a given area. For instance, who is to decide that a "substantial planning problem" exists in this or that city, county or state? Should this be the HEW in Washington, the State Health Department, the local Chamber of Commerce, doctors, hospital administrators or who? It is self-evident that the authority determining that the problem actually exists must have the choice in appointing a sympathetic local committee. And thus we note the apparently inevitable inclusion of government in these plans in the statement on page 14 of this Report stating "Each region having a substantial hospital or related health facility planning problem should have a local planning agency formed either by voluntary community initiative or by official action of the *state or local government*." Judging from this statement it would seem apparent that the American Hospital Association and the Public Health Service will initiate the program by legislation if satisfactory progress is not made on a voluntary basis.

With organizations of this magnitude pressing the campaign, it is prudent that physicians know just what type hospitals and related health facilities are planned.

However, conference with AHA officials has resulted in a fuller explanation of the statement "by official action of the state or local government" cited above. It is a fact that in some areas of this country particularly in some cities (Boston, Massachusetts being a notable example) a hospital cannot be built and put into operation without consent of the local government, city, state or county. This amounts to a franchise arrangement and whether it is good or bad is a subject for considerable debate. In any event, the intent of the statement quoted above, according to AHA officials, was to cover such areas where so-called planning agen-

cies have already been established by a local government to approve or disapprove a new hospital in the community. The aim of the Hospital Association in Oklahoma is to form a State Advisory Council to which local voluntary councils can apply for aid in securing data that will enable them to evaluate the needs of their community in regard to hospital facilities. All semblance of anything being compulsory in this program is carefully avoided by the Hospital Association *per se*. It is envisioned that even after a local group has obtained data and opinions regarding hospital construction or renovation in a given area from the State consultants group, there will still be no authority to compel the local group to abide by the State Advisory Council's recommendations.

The function of the local government in this projected areawide planning as far as Oklahoma is concerned has been summarized by Paul A. Snelson, Director of the Hospital Construction Division of the Oklahoma State Department of Health, as we learn from his remarks at a working conference on Methodology of Areawide Planning for Hospitals and Related Health Facilities sponsored by the AHA and the Public Health Service in Kansas City, Missouri April 29, to May 1, 1963. Mr. Snelson states, "insofar as Oklahoma is concerned the gospel of areawide planning has been more consistently presented and probably with the least results of any of the states that have made a valiant effort to promote the concept." Mr. Snelson describes the results of a poll he had taken of several state agencies in our area which found that although "the philosophy of areawide planning is basically sound, however, its practical application would be more or less presently limited to metropolitan areas"; and he gleaned further information that the groups and individuals to be concerned with this program generally expressed apathy toward it.

Of special concern to physicians is the part of the planning which is directed explicitly to "related health facilities." The definition of these facilities is quite hazy when the individuals concerned with the planning are questioned or when their publications are reviewed.

Thus, it becomes evident that the resolutions 7 and 23 are timely. Whether one subscribes to the condemnation of the whole program as suggested in Resolution No. 7, or goes along with the recommendation for further study by the OSMA as suggested in the same resolution, it must be admitted that the subject is a pertinent one. Further analysis of this projected program will be presented in a second discussion to be presented in the *Journal* next month. — *Walter E. Brown, M.D.* □

Thoughts on Medicare

IT WAS MY recent duty and pleasure to file, on behalf of the Oklahoma State Medical Association, a statement with the House Ways and Means Committee opposing H.R. 3920, the King-Anderson Bill, which would provide medical care for the aged under the Social Security system. My statement was presented to the Committee by my Congressman from the Sixth District, the Honorable Victor Wickersham, with the following introductory statement:

"Mr. Chairman, I'm here to introduce a statement on behalf of the Oklahoma State Medical Association, which is represented today by one of my constituents, R. R. Hannas, M.D., Vice-President of the Oklahoma State Medical Association from Sentinel, Oklahoma. I would like to add my own recommendations to the Oklahoma State Medical Association's written statement, to the extent that I sincerely feel the elderly citizens of my state are being well served through the provisions of the Kerr-Mills program."

Mr. Wickersham assured me that he *is and has been* against socialized medicine in spite of the fact that he realizes a large number of physicians in his District do not support him in elections.

While in Washington I visited the offices of all of our Representatives except one and visited the offices of both our Senators. I was introduced to Representative Wilbur Mills, Chairman of the House Ways and Means Committee, and talked at considerable length with Representative Clark Thompson of Texas, an influential member of this Committee. It was my impression that the majority of the Committee objected to the presently proposed Bill because of the

inclusion of its provisions under the Social Security system.

I heard the testimony of Governors Reynolds of Wisconsin and Peabody of Massachusetts, Mayor Wagner of New York City, and James Carey of the AFL-CIO. It was apparent to me that the King-Anderson Bill is merely a wedge by which the door is to be opened to the socialization of medicine in general. This is a point we should not forget.

In order to combat H. R. 3920 and the socialization of medicine, it is necessary that we understand the principles involved and the first is the principle of Social Security.

Whether or not the medical profession accepts it, the idea of Social Security has been given overwhelming approval by the people of this country and is here to stay. The basic concept is that when an employer sets out to hire people to work for him he recognizes the responsibility to help them prepare for the days when, because of their age, he is no longer able to pay them wages. An employee contributes half of the amount set aside for future use and the employer contributes the other half. Government is the agent.

The next principle involved is: "How far does the employer's responsibility extend after having helped the employee to set up a retirement fund? Is the employer responsible for the health of his employee *after retirement*? How about *before retirement*?" Labor has stated in testimony before the House Ways and Means Committee that it is willing to pay the additional taxes included in obtaining medical benefits after retirement, but labor is only offering to pay *half* of the taxes, expecting the employer to pay the other half.

Another principle involved is: "At what point does an individual's responsibility for his own food, clothing, shelter, and health stop?" There are those of us, brought up in the "Semper Fi" tradition, who believe that it *never* stops. The Semper Fi tradition implies that one cannot contribute to the well-being of the group until he is able to take care of himself. If we continue to discourage individual responsibility we will deteriorate as a nation.

The Kerr-Mills Act is being questioned as a suitable alternative to the King-Anderson program. While Oklahoma has implemented a liberal version of Kerr-Mills for its med-

ically indigent aged group, other states have only inaugurated token programs and some states have done nothing.

Before embodying the above principles in suggesting another alternative to the King-Anderson Bill, let us examine the basic problem, which is that for many people the biggest medical and hospital expenses occur at a time late in life when their income is at its lowest. This is particularly true for those persons who have retired and are living on their social security retirement income. Though this is a relatively small percentage of the population now it will probably reach 95 per cent in the not too distant future. Most of this group can live well enough on social security payments unless they encounter a medical catastrophe. Some have been foresighted enough to provide for such crises by carrying private health insurance. In some areas, our own State included, the "Blues" have come up with special plans to help people in the over 60 and 65 age groups to prepare for such emergencies. There is criticism by some that such private plans are not adequate. Human nature being what it is, others cannot or will not take care of those problems on their own initiative. Apparently some system is needed to help people pay during their earning years for the health expenses of their later years.

We in organized medicine have fought any attempt at government control over our profession, including hospitals, and let us continue the fight vigorously. However, whether we will admit it or not, we have created the impression that we are *against* many things and *for* nothing. Bearing this in mind and in order to help combat both the problem at hand and our unfavorable image, I would like to suggest that in fighting H.R. 3920 to our utmost, we offer an alternative proposal embodying the following.

(1) A determination should be made as to *what* is considered adequate medical and hospital coverage for persons in this age group. This should *not* be total coverage.

(2) Private insurance companies, including Blue Cross and Blue Shield, should be allowed to submit bids estimating the cost of obtaining such coverage. This can be done locally or nationally.

(3) The costs of such coverage shall be paid by individuals from payroll deductions

or periodic contributions (neither through the Social Security system), spread over the working years of the individuals concerned.

(4) Coverage shall be on a voluntary basis, as it is for life insurance, fire insurance, and most other insurance.

(5) The employer shall not be required to supplement the individual's contributions.

(6) The insurance policies shall be of a "deductible" nature in order to *discourage* unnecessary usage. Plans submitted thus far tend to encourage usage, even though total amounts are limited.

A bill embodying these features could be drafted and submitted to the Congress. Such legislation, supported by the medical profession, should enable more people to meet the health expenses of old age by preparing ahead of time, and by favoring this approach we are encouraging the development of individual responsibility.

Man's rights are not to be confused with his *responsibilities*.—R. R. Hannas, M.D. □

The General Practitioner's Resolve . . .

THE OKLAHOMA Academy of General Practice in session in Tulsa February 2nd, 3rd, and 4th, 1964 officially went on record as condemning the University of Oklahoma Medical School for not directing more students into general practice and went on record to oppose the appointment of Doctor Stewart Wolf as prospective Dean of the Medical School, and further backed Doctor S. N. Stone, Associate Dean of Clinical Instruction, for the post of Dean. These actions prompted editorial comment in at least two of our large metropolitan papers. *The Oklahoma City Times*, in an editorial of Friday, February 7th, 1964 headed "Wrong Diagnosis" states: "Oklahoma's general practitioners this week at Tulsa outlined a number of problems afflicting them and medicine in general—ills that should concern all of us. But the only trouble was that they picked a handy 'scapegoat' in the University of Oklahoma Medical School and proceeded to blame everything on that institution."

The editorial went on to state: "Now not everything is completely rosy at the medical

school, as even its best friends will concede. But the attack was particularly uncalled for because it ignored two salient facts:

"One—The complaints they are making about the OU Medical School concern situations that exist also at every major medical school in this country. Ours is in the mainstream of the trend—good or bad—toward research and specialization.

"Two—As long as medical students are free men, the medical school or no one else can make them become general practitioners or designate the towns where they'll enter practice. Indeed, it is curious that physicians, staunch advocates of freedom who oppose socialized medicine as a threat to their freedom, somehow think the medical school should manage its students' futures."

At the end of the editorial, the writer concludes: "The G.P's have a right to criticize. But they also have a responsibility to suggest solutions which wouldn't tear down our medical school by fracturing the morale of faculty and students and eventually flushing out our notable faculty—and thereby plummeting our reputation nationally."

The Tulsa Tribune, in an editorial entitled "The Vanishing G.P." of February 6th, 1964 related the following: "We are in the age of the specialist. The associate dean of the University of Oklahoma Medical School is quoted as saying there isn't a single student currently in training there to become a family doctor. For one thing, there's generally more money in specialization. For another, the specialist can organize his hours so he is less likely than the G.P. to be called out in the middle of the night. The upcoming generation of doctors, understandably, likes its hours neatly organized. The Oklahoma Chapter of the American Academy of General Practice was bemoaning this decline of the family doctor at its convention in Tulsa this week, and we share its concern. If this goes on, the only thing left for some G.P.'s will be to specialize themselves. They will become diagnosticians, and specialize in referring patients to the appropriate specialists.

"As a matter of fact, in the major cities, with their multi-specialty clinics, this isn't a bad arrangement. But what happens in the small towns, where there is no clinic full of specialists?"—Walter E. Brown, M.D. □



It has always been my conviction that everything that had to do with medicine, or any of its facets, was business of the association. This year, being more intimately connected with our affairs than ever before, the enormity of doing that has become more and more apparent. We find ourselves involved in almost as many items as does the AMA, yet with a far smaller budget and much less staff. It is only because of the efforts of our conscientious voluntary work that we are able to accomplish as much as we do, and present even a passable front to a public expecting and demanding our attention. We find ourselves constantly trying to plug a hole here, or a hole there, only to find the back door opened and the deluge coming in from the rear.

Quiz yourself just in naming some of our problems. You probably will not know half of them. Now give some good, logical, realistic and workable answers. Everybody has answers, but will they fill the bill? For example, you may feel sure that the best answer for a woman is to knock her alcoholic husband in the head, yet you know that that answer is totally unacceptable. So it is with many of our problems.

Permit me just to list a few of them: National health care schemes, third parties, fee schedules, welfare care, our own insurance problems, liability, time loss, health and accident and death, mental health, rehabilitation, industrial insurance, school lunches, school health, nursing profession relations, hospital relations, the Blue Plans, Area Hospital Planning.

Medical school problems, not the least of which is the selection of a new dean, recruitment of medical students, as well as paramedical personnel, the Town and Gown Syndrome, postgraduate education, hospital accreditation, osteopathic relationships, relationships with other health groups, office space, maintenance of building and grounds, staff management, communications with the physicians and all of the other organizations, legislative and governmental contacts. Not the least of our problems is the implementation of policies established by the AMA and passed on to the local level.

Our staff does not have the time to monitor the literature, just to find out what is on schedule, least of all to attend the meetings to monitor them. We know our problems are not going to lessen. We know that with the solution or alleviation of one, that new ones will be forthcoming. Be informed that the new catch word we will have to meet is "TOTAL HEALTH CARE." These challenges can only be met in one of two ways: More voluntary help, or more budget and staff. If we don't meet them, and far better than we have been meeting them, we are wasting our time and money. They can and must be met.

My recommendation is more budget and staff. It is not right that our conscientious volunteers make all of the sacrifices to do OUR work. Our debt to them is incalculable. The only way each can, or will bear his just part is through dues and assessments. We will never be free of the need for volunteers, but their burdens can be eased by more staff help. □

Joe L. Quet, M.D.

The Destructive Force of Sunlight

JOHN M. KNOX, M.D.

The growing certainty that sunlight exposure adversely affects skin has aroused many physicians' interest in diseases in which irradiation by sunlight is a significant factor.

CONSIDERABLE EVIDENCE implicates sunlight exposure as the most common and noteworthy cause of detectable degenerative change in skin. My associates and I recently tried to further define these changes and determine their occurrence in patients of different ages and races.¹

Biopsy specimens were obtained from the face, lower arm and buttocks in each of 28 volunteers previously exposed to varying amounts of sunlight. After measuring epidermal and dermal changes, we then compared them according to the volunteers' age, race, sex, complexion and estimated degree of life-time exposure to sunlight. Our findings are summarized as follows:

Dermis

None of the sections from the buttocks

From the Department of Dermatology, Baylor University College of Medicine, Houston, Texas.

This paper was presented at the Oklahoma State Medical Association Meeting, May 4-5, 1963, Tulsa, Oklahoma.

revealed degenerative changes. Skin from faces and arms of older volunteers showed the most severe damage, and there was a statistically significant correlation between age and actinic degeneration of collagen in the arm. Volunteers with the most severe exposure demonstrated the most extensive changes, but not to the point of statistical significance. No degenerative changes were observed in specimens from Negro volunteers—further support for many investigators' belief that epidermal melanin protects the dermis from ultraviolet rays.²

In Caucasians, complexion type showed no correlation with degree of damage.

Epidermis

In Caucasian volunteers, the total average thickness of the epidermis was greatest on the buttocks (105 millimicrons) and least on the face (71 millimicrons). Viable layers maintained a relatively constant minimal thickness; thus a variation in maximal thickness accounted for most of the variation in total thickness. In Negro volunteers, no significant difference existed in the maximal thickness of viable layers. The maximal viable layers of the face and arms were thinner in Caucasians than in Negroes; however, no significant difference existed between the races in the thickness of this layer on the buttocks. No significant differences in epidermal thickness were found between

men and women, between young and old volunteers, or between light-and dark-complexioned types.

These data suggest that collagen degenerates independently of age and that degeneration is caused by cumulative injury from ultraviolet rays of the sun. The extent of damage is apparently determined by the degree of exposure and the amount of natural and artificial protection.

CARCINOGENESIS

The labels "farmer's skin" and "sailor's skin" frequently are applied to the weather-beaten, dry, coarse and leathery skin of many outdoor workers. This type of skin is prone to develop pre-malignant and malignant tumors. MacDonald³ and others have demonstrated that fair-skin individuals exposed to large amounts of sunlight have more skin cancers than any other group, whereas Negroes have amazing resistance to cutaneous malignancies.

The carcinogenic wave lengths of the ultraviolet spectrum fall between 2900 and 3341 Å. In experimental animals, the duration of the pre-cancerous period varied inversely with the intensity of the daily dose of radiation. Carcinogenesis, once initiated, progresses regardless of whether there is further exposure to ultraviolet light. A similar situation apparently exists in man.

PHOTOSENSITIVITY REACTIONS IN VARIOUS DISEASES

A photosensitivity reaction is usually easily recognized. The lesions almost invariably are erythematous and limited to light-exposed areas of the body but rarely involve the scalp, upper eyelids or the skin just under the chin. Lesions on the arm usually follow the lateral surface more than the medial surface.

Reaction patterns vary, and the eruption can imitate other dermatologic conditions—contact dermatitis, seborrheic dermatitis, neurodermatitis, erythema perstans, erythema multiforme, pemphigus erythematosis and several types of eczema.

Most people with photosensitivity tell their physicians that sunlight seems to aggravate their eruptions. However, fluorescent light-

ing may be the source of exposure and this possibility should be discussed with the patient. Photoskin tests can help to confirm the clinical diagnosis. Jillson and Curwen⁴ have developed such a technic which utilizes an inexpensive instrument.

Photosensitivity has two basic mechanisms: phototoxicity and photoallergy. Phototoxicity is an accentuation of the skin's normal response to sunlight exposure. The process is a photodynamic reaction with no immunologic basis. Conversely, photoallergy has an immunologic mechanism and the afflicted individual's response to exposure may be urticarial, papular, erythematous or eczematous.

As photosensitivity is much more common than most physicians suspect, a discussion of diseases which involve this phenomenon seems warranted.

Polymorphic Light Eruptions

This represents the most common manifestation of light sensitivity. Lamb and his associates⁵ classified these eruptions into four clinical variants: 1) plaque-like; 2) contact, eczematous; 3) papular and prurigo, and 4) erythematous. Eruptions develop usually in the spring or summer and disappear in the fall or winter. Patients often state that sunlight causes or aggravates their condition; automobile drivers frequently have more extensive involvement on their left side. The etiology of this condition is obscure, but some cases are due to photoallergic mechanism.

Porphyria

This disease may be classified into two basic categories: *erythropoietic* and *hepatic*.

The *erythropoietic* type is congenital, with males being affected twice as often as females. First discovered in infancy or early

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He is a member of the American Academy of Dermatology, the Southern Medical Association, a member of the Board of Directors of the Society for Investigative Dermatology and the American Social Health Association.

childhood, the early symptoms of this abnormality are pink or reddish urine and photosensitivity. Erythematous papules and vesicles develop on the face, ears and uncovered portions of the arms and legs after exposure to sunlight. Brown stains appear on the teeth and autopsy reveals that the bones are impregnated with porphyrins. The clinical diagnosis can be confirmed by finding uroporphyrin (primarily uroporphyrin I) in the urine.

As the disease progresses, melanosis and hypertrichosis may develop. Other late complications include splenomegaly, anemia and osteoporosis. There is no satisfactory treatment but these children should not be exposed to sunlight.

The hepatic type of porphyria may manifest itself as 1) acute and intermittent, 2) porphyria cutanea tarda, or 3) a mixture of these two varieties.

Individuals with *acute intermittent porphyria* frequently complain of abdominal or nervous system symptoms. Their abdominal pain can be extremely severe and it is not unusual for such patients to have undergone abdominal surgery one or more times. Diagnosis depends upon finding porphobilinogen in the urine, which may look like port wine during acute attacks but often is clear. Photosensitivity does not occur in this type of porphyria.

Porphyria cutanea tarda is characterized by bullae on the hands, melanosis and a bleary-eyed, dissipated appearance. Some individuals so afflicted have eczematous lesions and bullae on the face and ears. Many are alcoholics; liver function tests may reveal damage to the liver. Uroporphyrin is seen in the urine, although this finding sometimes requires repeated examinations. Wood's light produces a pink fluorescence in the urine.

Pellagra

Patients with this rare vitamin deficiency disease are deficient primarily in nicotinic acid. Dermatologists in the Southwest usually observe this condition among recluses, alcoholics, elderly widowers with an improper food intake and individuals with psychiatric disorders. Some patients have the well-known triad of diarrhea, dementia

and dermatitis; most cases are not so well-defined. Photosensitivity, a common characteristic of this condition, primarily involves the backs of the hands; the face and other exposed areas of the body may be similarly affected. The tongue is often red, and gastro-intestinal symptoms are common. Nervous system symptoms also may exist with fatigue, insomnia, headache, anorexia and vertigo being the most frequent.

Lupus Erythematosus

This disease may be classified as acute disseminated, subacute disseminated and chronic discoid. The discoid and disseminated varieties are probably related.⁶ Lesions are located primarily on light-exposed areas of the body, especially the cheeks, and exposure to the sunlight may produce serious exacerbations of the disseminated variety. Further clinical description will not be given, as most physicians are familiar with the symptomatology of this condition.

Xeroderma Pigmentosum

This rare and fatal hereditary disorder characterized by extreme reactivity to sunlight first appears during childhood. Patients develop hyperpigmentation, atrophy and telangiectasis. Their skin undergoes premature actinic degeneration and cutaneous malignancies rapidly ensue. Protection from sunlight is extremely important, but these patients eventually develop metastases and few live past adolescence.

Hydroa Aestivale

This disease occurs almost exclusively in children and adolescents. A vesicular eruption, which spreads over the face and lateral aspect of the arms, tends to develop in summer and disappear in winter. Except when associated with congenital porphyria, this eruption usually clears spontaneously about the time of puberty.

Colloid Milium

This light-induced dermatosis primarily afflicts fair-skin people chronically exposed to intense sunlight. This incidence is much higher in Texas than in the northern United States. It was commonly seen in the East Indies during World War II. Its victims develop pseudovesicles containing colloid material of blood protein origin. These lesions usually appear on the dorsum of the hands, face and neck. Avoiding sunlight is the only satisfactory treatment.

Natural Protection

The amount of natural protection afforded by the skin depends upon three factors: 1) surface sweat; 2) thickness of the stratum corneum, and 3) amount of pigment in the epidermis.

Sweat protects the skin by absorbing ultraviolet rays, apparently because it contains urocanic acid. The stratum corneum, which tends to scatter and absorb erythemogenic light, thickens after exposure to the sun's rays. In dark-skin individuals, this layer contains many melanin granules; thus Negroes have much more natural protection than Caucasians. Pigment in the basal layer offers only slight protection to the epidermis since damage from sunlight occurs above this level but is of value for the dermis.

Chemical Sunscreens

Chemical sunscreens absorb ultraviolet rays and dissipate their energy in a harmless manner. The agent most commonly used in commercial preparations is para-aminobenzoic acid (PABA) or one of its derivatives. Although most commercially available suntanning formulations enable the sun bather to receive four to six times as much exposure without getting a sunburn, they do not absorb the longer photosensitizing and suntanning wave lengths. Benzophenones, however, have an exceptionally wide absorption spectrum and thus are more satisfactory for patients who want or need complete protection from ultraviolet rays.⁷

Physical Sunscreens

These opaque chemicals, which scatter light rather than absorb it, include titanium dioxide, talc, kaolin, zinc oxide and betonite. Some preparations combine one of these agents with a chemical sunscreen. The disadvantage is that these formulations are visible.

Systemic Agents

Since Page reported in 1951 that quina-craine effectively controls discoid lupus erythematosus,⁸ antimalarial drugs have been widely used to treat patients with diseases caused or aggravated by sunlight exposure. Their use is contraindicated in patients with porphyria because of possible severe side effects. Chloroquine and other antimalarial

drugs have their greatest value in suppressing discoid lupus erythematosus and polymorphic light-sensitive eruptions, but also are often used to treat patients with lupus erythematosus of the subacute or the acute disseminated variety after controlling the disease with systemic steroids.

When one antimalarial drug is not suppressive or loses its effectiveness, the patient may benefit by changing to another of these agents. The one most widely administered is chloroquine. Usually small doses are effective. Many dermatologists give their patients two 250 mg. tablets daily for one or two weeks and then reduce the dose to one tablet daily.

SUMMARY

Contrary to popular public opinion, most effects of sunlight on the skin are harmful rather than beneficial. Detectable degenerative changes in skin are caused by cumulative injury from ultraviolet rays of the sun. The extent of damage apparently is determined by total amount of exposure and the degree of natural and artificial protection.

Light-sensitivity, a phenomenon much more common than many physicians suspect, is manifested in polymorphic light eruptions, porphyria, pellagra, lupus erythematosus, xeroderma pigmentosum, hydroa aestivale and colloid milium.

Patients can receive partial or complete protection from damaging ultraviolet rays by using chemical or physical sunscreens. Many patients with a systemic disease accompanied by photosensitivity also will benefit from a local steroid or an antimalarial agent. □

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- Baylor University College of Medicine, Houston, Texas

Necrosis of Stomach Wall

Following Gastric Freezing,

An Unusual Complication

EDWARD L. MOORE, M.D.

Perforation of the gastric wall after a freezing procedure is reported.

DISRUPTION OF the stomach wall due to necrosis following a gastric freezing procedure is hereby reported. An opening approximately two inches in diameter developed five days after the use of a double lumen tube (stomach balloon).

CASE REPORT

A 63-year-old white man was admitted to Hillcrest Medical Center because of a duodenal ulcer. He gave a typical ulcer history with recurrent symptoms in the spring and fall of each year.

There was no history of bleeding, perforation or obstruction, but roentgenograms had shown a definite deformity and ulcer formation in the duodenum on several previous occasions. He was referred by his family physicians for consideration of treatment of the ulcer by the freezing method.

Physical examination revealed the following: weight 193, height 5'7". There was tenderness on pressure over the epigastrium. A few rales were heard in his chest which disappeared on coughing.

Laboratory findings before hypothermia were: (1) Hemoglobin 16.8; (2) Hematocrit 51 per cent; (3) Serum Calcium and Phosphorous levels were normal; (4) Hollander test revealed a marked increase in acid content; (5) Insulin tests were normal; (6) Urinalysis was normal except for a few white blood cells and an occasional red blood cell.

On March 21, 1963, the gastric hypothermia procedure was begun at 12:15 p.m. The volume was 1200 cc. Inflow temperature was minus 20 degrees Centigrade and outflow temperature was minus 11 degrees Centigrade. The process was discontinued at 1:00 p.m. and at 1:15 p.m. the tube was removed. No difficulties were reported.

At 10:15 p.m. the patient vomited a small amount of old blood but otherwise he remained comfortable until the next morning when he complained of gas pains which were relieved when he eructated.

During the next five days he complained periodically of pain in his abdomen for which Demerol was administered frequently. Milk aggravated his gastric complaints causing nausea and "gas pains."

On March 27th, severe pains in the abdomen caused moaning and thrashing about in bed. The patient was perspiring profusely. The abdominal wall was rigid. At 8:00 p.m. a roentgenogram showed free air in the abdomen and it was obvious the patient had a generalized peritonitis.

He was taken to surgery at 10:20 p.m. on the same day. Exploration revealed more

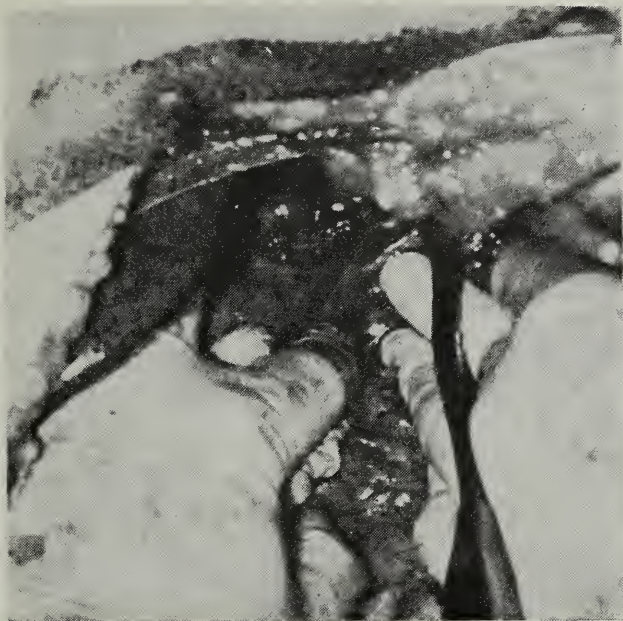


Figure 1. Opening in stomach—two inches in diameter.

than 1,000 cc. of dark thin liquid in the abdominal cavity which was aspirated. The omentum was adherent to the fundus of the stomach with fibrinous adhesions. The stomach itself was very edematous and hemorrhagic with areas of ecchymosis throughout. The distal 20 per cent of the stomach appeared normal to palpation. A necrotic area about two inches in diameter was found high and posterior in the fundus (figures 1 and 2). The diaphragm in this area was also hemorrhagic. The stomach wall was three times normal thickness and difficult to repair because some of the stitches pulled out as closure was attempted. The patient had a short stocky body build so it was necessary to remove the xyphoid process and loosen the left lobe of the liver so better exposure could be obtained. Palpation of the duodenum revealed scarring and deformity. No other pathological findings were present. The abdominal wall was closed with

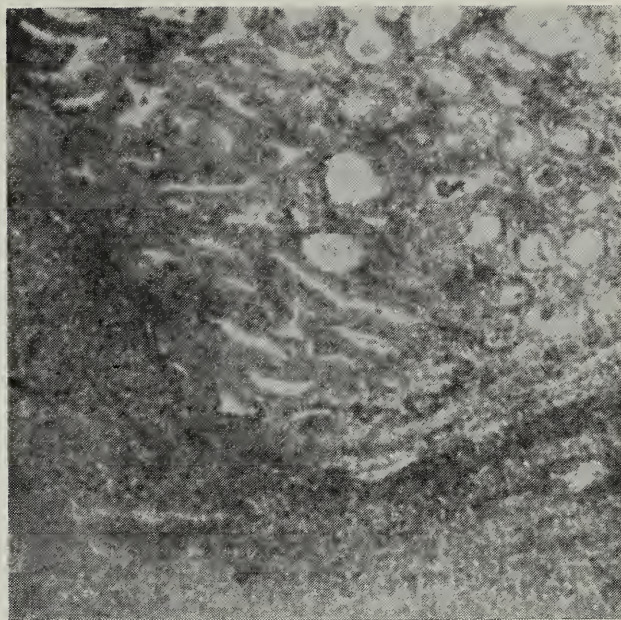


Figure 2. Stomach—showing zone of hypothermia necrosis.

wire sutures to avoid evisceration. A suction tube was placed into the stomach and kept there until the patient began to pass flatus freely.

The medical consultant digitalized the patient the next day and assisted in his care post-operatively.

A stormy post-operative course followed. He had a wound separation on April 6, 1963. There was no evisceration of abdominal contents but it was necessary to return him to surgery for closure. Total protein measure-

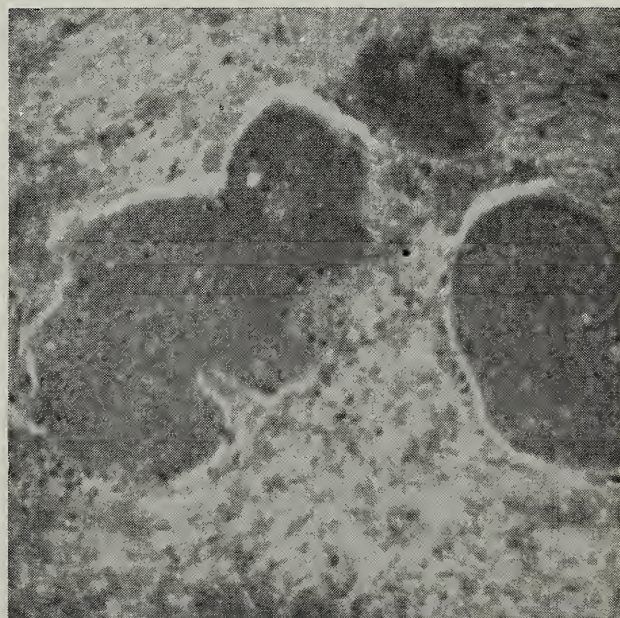


Figure 3. Stomach—Hypothermic necrosis, showing vascular dilatation and thrombosis with ecchymosis.

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ments at this time were decreased and the albumin-globulin ratio was reversed. On April 9th, he complained of a sharp pain in the right lower chest which was thought to be an embolus. X-ray confirmed this suspicion and he was treated with heparin and coumadin. Later he developed a staphylococcal pneumonia with fluid in the left pleural cavity. Cardiac irregularity developed and was treated appropriately.

He was discharged from the hospital in fairly good condition on April 26, 1963. He still complained of "gas pains" at times, but after discharge he gradually improved and was free of ulcer symptoms when last seen August 6, 1963.

COMMENT

Undoubtedly this complication is rare. Examination of the stomach at surgery plainly outlined the frozen area which involved the proximal 80 per cent. The distal 20 per cent of the stomach wall appeared normal and was not thickened, edematous, hemorrhagic or ecchymotic. Histologic studies on the tissue from the edges of disruption showed acute focal necrosis with suppurative focal cellulitis, extensive capillary and arterial thrombosis, intense con-

gestion and focal hemorrhages, focal degeneration, necrobiosis and necrosis of parietal cells (figure 3).

The gastric freezing procedure was done according to the usual routine without variation. In fact, as a special precaution, the tube was not removed from the stomach for 15 minutes after the freezing in order to minimize the possibility of necrosis.

I am sure there have been other perforations of the stomach following gastrohypothermia but probably none that involved such a large area.

SUMMARY

A case of necrosis of the fundus of the stomach following treatment of a duodenal ulcer by the gastric freezing method has been presented. This is the only case of its kind in the literature to date and emphasizes the need to watch for this complication in the gastric freezing procedure. ☐

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NOTE: Since this paper was written, the patient has complained of recurrent pain in the epigastric area. On January 2, 1964 radiographic studies revealed the presence of small duodenal ulcers. There was also a pseudo-diverticulum apparently due to contraction and scarring.

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Nephroptosis—

A Possible Cause of Hypertension

JOHN R. DERRICK, M.D.

A relationship between nephroptosis and hypertension was first noticed about 25 years ago. Several cases recently indicate that this condition is more common than generally realized. A technique for diagnosis of this condition by noting effects of postural changes on the renal artery during arteriography is discussed.

IDIOPATHIC fibromuscular hyperplasia of the renal arteries was first described in 1938 by Leadbetter and Burkland.² Two years later, in 1940, the relationship between nephroptosis and hypertension was first postulated by McCann and Romansky who reported five female patients with both conditions.³ Since these reports, there has been continuing interest in the problem. Indeed, in the last three years alone, more than 40 cases of fibromuscular hyperplasia of the renal arteries and associated hypertension have been reported, but few of these had associated nephroptosis.^{1, 4, 5}

The purpose of this report is to present three of seven cases of nephroptosis with associated fibromuscular hyperplasia and hypertension seen at The University of Texas Medical Center. Experience with these recent cases indicates that the occurrence of hypertension secondary to renal ptosis is

more common than is generally realized. A technique for diagnosis of renal ischemia by noting the effects of postural changes on the renal artery during arteriography will be presented.

CASE HISTORIES

Case 1. A 23-year-old white married woman, gravida II, para II, had been successfully treated medically for hypertension in October, 1961. In October, 1962 she was admitted to the medical service for evaluation. Major symptoms were severe headaches, and dizziness. Blood pressure was 210/118 mm. Hg. A Grade I retinopathy was noted on fundoscopic examination. An abdominal bruit was heard over the right renal area near the midline.

Intravenous pyelogram showed no abnormalities except for some delay in appearance of the dye in the upper collecting systems of the right kidney. Retrograde translumbar aortogram showed the origin of the renal artery to be much higher on the right side and the right kidney to be much lower in the pelvis than the left kidney. Results of a Regitine test were negative and a Howard test showed the blood volume on the right side to be 50 per cent less than on the left. Creatinine excretion was greater on the right, but sodium excretion was less. Excretory urogram (Hypaque wash-out) showed decreased renal vascular flow on the right.

A revascularization procedure was performed on the right kidney and at operation the entire renal artery was found to be in-

This paper, from the Department of Cardiovascular Surgery, University of Texas Medical Branch, was presented at the Oklahoma City Clinical Society meeting, October 28-30, 1963.

volved to the bifurcation. A successful anastomosis was made to the internal iliac artery with use of a vein graft. The postoperative course was uneventful and by the seventh postoperative day the blood pressure was stabilized between 120/86 and 130/90 mm. Hg. Before the patient was discharged from the hospital, a retrograde arteriogram showed the graft to be patent. Subsequent follow-up studies, including Hypaque wash-out in January, 1963, showed no evidence of ischemia on the right side.

Case 2. A 22-year-old white married woman, gravida III, para III, was admitted to the hospital in September, 1962 for hypertension, which had developed gradually during the two previous months. Chief complaints were nervousness and anxiety. At first examination, blood pressure was 140/105 mm. Hg. in the right arm, and in the left arm 150/110 mm. Hg. Review of major systems showed no notable abnormalities.

An intravenous pyelogram showed good dye concentration in both kidney pelves. The kidneys were about equal in size, although the right kidney appeared to be considerably lower in the pelvis than the left, with a "scalloped effect" of the right ureter. During retrograde arteriography, an appreciable drop in the kidney shadows was noted when the patient was raised to a semi-erect position, with the right kidney much more mobile than the left. The roentgenograms also showed the origin of both renal arteries to be close together, although both were fairly long and of adequate caliber.

During hospitalization of this patient blood pressure recordings were made every three hours. When the patient was recumbent, pressure in the right arm varied from 160/100 to 140/100 mm. Hg. After ten days of bed rest with the foot of the bed elevated 30 degrees, the pressure gradually diminished to a level that varied from 130/90 to 120/80 mm. Hg. Since the patient showed only minimal signs of fibromuscular hyperplasia, an abdominal surgical girdle was prescribed. On follow-up studies, she has remained normotensive.

Case 3. A 33-year-old white married woman, gravida III, para III, was admitted to the hospital in January, 1963 for evalua-

tion of severe hypertension of 12 months' duration. Chief complaints were fatigue, venous distention, episodes of loss of vision, edema and numbness of the extremities, nausea associated with vomiting, dyspnea and palpitations. During the previous two years the patient had lost weight (from 132 to 114 pounds).

Blood pressure was 300/175 mm. Hg. and fundoscopic examination showed a Grade II retinopathy. Intravenous pyelogram showed both upper collecting systems to be within normal limits with prompt bilateral excretion of the contrast medium. A retrograde arteriogram showed fibromuscular hyperplasia of the right kidney. The right kidney was 9.5 cm. in length, and the left kidney, 13 cm. in length. The right kidney was 10 cm. lower in the abdomen than the left. Hypaque wash-out study showed markedly decreased renal vascular flow on the right side.

A revascularization procedure was performed on the right kidney with end-to-end anastomosis of the right renal artery to the right internal iliac artery, with vein grafts of both vessels. Postoperative course was uneventful with return of blood pressure to normotensive levels. Repeat Hypaque wash-out study showed good revascularization with normal excretion time. At the last follow-up visit in July, 1963, the patient was still normotensive and had no complaints.

DIAGNOSTIC PROCEDURES

Although excretory urography provides useful information in differential diagnosis,

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retrograde femoral arteriography is the definitive diagnostic study. In the three cases cited, the Seldinger technique was used. In this procedure, the percutaneous femoral route is utilized, with a catheter being inserted into the aorta and the tip positioned inside of or adjacent to the origin of the right renal orifice. With the patient in the Trendelenberg position, 25 cc. of 76 per cent contrast medium (Renografin) is injected and serial films made every half second. A second injection with the same quantity of contrast material is then made with the patient in the erect position.

In each of three cases the renal artery increased considerably in length with significant narrowing of the renal artery when the patient assumed the erect position. The lumen of the renal artery was measured on the roentgenogram and the narrowing usually occurred in the mid-portion. In general, roentgenographic findings as to location and appearance of the hyperplastic lesion, kidney size and appearance and density of the contrast medium presented many of the diagnostic features that have been well-documented in previous reports.^{1, 4}

In addition to conventional means of screening patients with renovascular hypertension, two of the patients reported were studied by tissue oxygen tension measurements. The percutaneous technique for this procedure is similar to that used for renal biopsy and measurements are made with a Liston modification of the Clarke electrode. The needle used is the small size (#18), smaller than the needle ordinarily used for percutaneous renal biopsies. Findings obtained by the percutaneous method were later confirmed at operation. When renal

cortical oxygen tensions were recorded at operation, a marked fall in renal oxygen tension with the kidney in the pelvis as compared with a higher reading with the kidney in a reasonably normal position was demonstrated. Also, after a functioning graft was in position, repeat measurements showed elevation of the renal cortical oxygen tension.

SUMMARY

Three patients with abnormal renal excursion associated with fibromuscular hyperplasia of the renal arteries and hypertension have been described. All of the patients had nephroptosis on the right side. All were white females with multiple pregnancies. In one the hypertension was corrected by a surgical girdle and in the other two patients revascularization procedures were necessary.

Diagnosis of renal ischemia by observing the effects of postural changes on the renal artery during arteriography has been discussed and preoperative percutaneous renal cortical oxygen tension measurements with repeat measurements at operation are reported. □

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CALL FOR RESOLUTIONS

The Speaker of the House of Delegates of the Oklahoma State Medical Association has issued a call for all resolutions to be considered by the policy-making body at its annual session, scheduled for May 1-2, 1964 in Oklahoma City.

Resolutions from county medical societies, or from individual OSMA members, must be received by the Executive Office of the association by April 1st in order to be included on the agenda. County societies are urged to utilize their March meetings for the purpose of drafting resolutions.

Acute Arsenic Poisoning in Children

CLINICAL SYMPTOMS

ROY L. ALEXANDER, JR., Ph.D.

Accidental poisoning in young children sometimes presents a considerable diagnostic challenge. Acute arsenic poisoning can be diagnosed with relative ease and prompt treatment may prevent a possible fatality.

SURVEYS OF AVAILABLE statistics indicate that poisoning accounts for about five per cent of the yearly death toll in children under five years of age in the United States. Of the total number (about 400) of fatal poisonings each year in this age group, approximately five per cent are due to the ingestion of a substance containing arsenic. Metallic arsenic and its salts are present in many commercially available insecticides, herbicides, cosmetics, dyes, paints, and especially in rodenticides in amounts up to 99 per cent by weight. A study¹ has revealed that in 12 southern states (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia), the death rate from ingestion of arsenic is six times that of the rest of the country. Aside from continuously instructing families in the prevention of poisonings in children, the family physician and pediatrician must be able to diagnose acute arsenic poisoning quickly and start treatment as soon after ingestion as possible if fatalities are to be kept to a minimum.

Symptoms of acute arsenic poisoning may appear immediately following ingestion or there may be a delay of several hours if the stomach contains food. It is particularly important to note that in some instances of arsenic poisoning, the earlier, more typical symptoms of poisoning have been followed by periods of normal, asymptomatic behavior. This fact plus the often misleading history obtained from the parent have sometimes resulted in an erroneous diagnosis which led to an appreciable delay in treatment of the patient. The usual clinical picture is that of a severe gastroenteritis. Ingestion of arsenic is almost always followed by projectile vomiting which is often bloody or green due to the presence of bile. The breath and vomitus may have the odor of garlic. Severe abdominal pain and muscle cramping may occur. There may be a profuse diarrhea with "rice water" or bloody stools. Hematuria, albuminuria and oliguria, may precede severe dehydration and shock. If large amounts of arsenic have been absorbed, the patient may have a rapid weak pulse, shallow respiration, low blood pressure, convulsions, coma and eventually respiratory failure.

DIAGNOSIS

Diagnosis of acute arsenic poisoning is made on the basis of a suspected history of ingestion, the clinical picture, and most important, the positive identification of arsenic in gastric contents or urine. Since repeated vomiting usually accompanies this type of

poisoning, it is possible that the analysis of gastric content for arsenic a few hours following ingestion may be negative. The urine should be analyzed if arsenic is not demonstrated to be present in the gastric content. Arsenic leaves the blood rapidly and serum levels cannot be relied on for diagnostic purposes.

A simple procedure² (Gutzeit's qualitative test) for determining the presence of arsenic in urine or gastric contents can be carried out quickly in any small laboratory using routine glassware and some inexpensive chemicals. This test will give a positive color reaction for as little as five-ten micrograms of arsenic. The normal concentration of arsenic in urine is reported to be five to 20 micrograms/100 ml.,³ consequently, no difficulty should be experienced in demonstrating increased levels in the urine using this test.

TREATMENT

If the ingestion of arsenic is suspected, gastric aspiration followed by intensive lavage should be instituted as soon as possible. Warm milk or water can be used as a lavage fluid. A freshly prepared mixture of ferric hydroxide and milk of magnesia are believed to be more effective due to their detoxifying action on arsenic salts. Gastric aspiration and lavage are contraindicated if the patient is convulsing. Dimercaprol is a highly effective antidote and is available as a ten per cent solution in peanut oil⁴ for intramuscular injection. If the history and symptoms of the patient indicate that a relatively small quantity (less than 1 mg./Kg. of body weight) of arsenic was ingested, the recommended dosage of BAL is 2.5 mg./Kg. every four hours the first 24 hours and two daily

injections thereafter until a test for arsenic in the urine is negative. In a patient presenting severe symptoms of poisoning, the dosage should be five mg./Kg. every four hours the first day with a gradually diminishing amount on successive days if the patient shows improvement. Unpleasant side effects (irritability, tachycardia, vomiting and fever) of BAL may be alleviated by administering ephedrine sulfate orally prior to injection of the Dimercaprol. In general, the patient should receive supportive therapy and should be watched carefully for change in status during treatment.

PROGNOSIS

The prognosis in acute arsenic poisoning depends largely on the quantity of arsenic absorbed from the gastrointestinal tract, the length of time elapsing before treatment is started, and the general physical condition of the patient prior to ingestion of the poison. Statistics on the fatality rate in arsenic poisonings in children are not readily available. Out of six children admitted to the Poison Control Center at Hillcrest Medical Center in Tulsa in 1962, one case terminated in death eight days following ingestion. The lethal dose of arsenic trioxide absorbed into the body of an adult is about 100 to 200 mg. Quantities as low as one to two mg./Kg. of body weight may be lethal in children.

The physician should encourage families with small children to refrain from using pesticides which contain arsenic. Many preparations are available commercially which have ingredients much less toxic and yet are quite effective in controlling insects and rodents. The same might be said for preparations containing thallium, strychnine, phosphorus, antimony, lead and organic phosphates. Undoubtedly, the best approach towards poison control in children is the continuous education of parents in the prevention of poisonings in the home. □

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Hereditary Factors Associated With Coronary Artery Disease

MARY BROWN, B.S.

A brief review of the literature indicates that certain factors which seem to be hereditary in nature have been associated with coronary artery disease.

DISEASE of the coronary arteries leading to inadequate blood supply of the myocardium may result from a number of pathological processes. Syphilitic aortitis, rheumatic arteritis, polyarteritis nodosa, emboli from subacute bacterial endocarditis, vasospastic disease, traumatic lesions and congenital malformations are infrequent causes of coronary insufficiency and perhaps account for less than one per cent of all cases of clinical manifestation by myocardial ischemia. Arteriosclerosis is the most frequent pathological process affecting the coronary arteries and is said to account for at least 95 per cent of all cases of myocardial damage due to ischemia.¹ Thus, the term coronary artery disease has become virtually synonymous with arteriosclerosis of the coronary arteries. In this paper, coronary artery disease will refer to intrinsic disease of the coronary arteries due to arteriosclerosis.

Recognition of coronary artery disease during life is dependent on clinical manifestations of the pathological process, yet it has been demonstrated that the pathological process may be present without clinical manifestation.^{2, 3} Recognition of this disease is further complicated by lack of agreement on the criteria for diagnosis. The symptom complex of angina pectoris is thought by many investigators to be sufficient evidence of coronary artery disease, while others rely on electrocardiographic evidence of myocardial ischemia for diagnosis. Perhaps these factors account for some of the discrepancy in statistics reported by various investigators.

Numerous factors have been studied and correlated with coronary artery disease but the exact etiology of the disease remains unknown. Discussion of the numerous theories which have been proposed is beyond the scope of this paper. However, the trend has been to consider it as a disease with multiple factors contributing to its development rather than a disease with a single cause.

Epidemiological studies have indicated that coronary artery disease is unevenly distributed throughout the world and that the incidence is higher in populations with higher standards of living. "It seems to follow inexorably in the wake of industrial and economic advances."⁴ In the United States where the levels of industrialization and

economic advances are high, the exact incidence is unknown, but in Framingham, Massachusetts the increment of the disease among middle aged men is one per cent per year.⁵ It has been estimated that one out of every three or four in the United States will suffer from coronary artery disease in middle age. The need for preventive measures in the control of this disease is obvious, and in order to be effective, such measures should be directed toward susceptible individuals. White⁶ has emphasized the need for more studies directed toward recognition of the individuals who are "candidates" for coronary artery disease.

Current investigations seem to indicate that heredity is less significant than sex in determining the "candidate," for in all studies the male sex is more frequently affected by this disease. Certain factors which seem to be hereditary in nature however have been associated with the disease, and when recognized may serve as an aid in identifying the "candidate." A brief review of some of the hereditary factors associated with coronary artery disease is presented.

FAMILIAL INCIDENCE

In 1930, Herapath and Perry⁸ reported a family with multiple sudden deaths due to coronary artery disease. Numerous studies since that time have indicated that familial occurrence of coronary artery disease is common. Thomas and Cohen^{9, 10} found that coronary artery disease was four times more frequent among the children of affected parents than among children of parents not so affected. The study was inconclusive for the presence of a single autosomal gene in the disorder. Instead it was proposed that a more complex etiology, possible multiple genetic factors with modifying environmental agents, was responsible for the hereditary nature.

Gertler and White found more deaths due to coronary artery disease in families of the coronary group than in families of the control group in their study. In the coronary group 9.8 per cent of mothers, 37 per cent of fathers and 8.6 per cent of siblings died of coronary artery disease, while in the control group only 7.7 per cent of mothers, 18.5 per cent of fathers and one per cent of sib-

lings died of the disease. The study again indicated a strong hereditary influence on the development of coronary artery disease, however, the mode of gene transference and degree of penetrance was not clarified.

Few investigations of the incidence of coronary artery disease in twins have been reported. Harvald and Hauge,¹² in a preliminary report on a study which they are conducting, indicate that the concordance rate is not significantly different among monozygous and dizygous twins. Conclusive evidence for the mode of gene transference or the lack of such transference must await results of further study.

DISEASE PREDISPOSING TO DEVELOPMENT OF CORONARY ARTERY DISEASE

Essential hypertension, diabetes mellitus and xanthomatosis seem to predispose to development of coronary artery disease. Since these diseases are thought to be hereditary in nature, this association tends to further indicate the influence of heredity on coronary artery disease.

Familial occurrence and hereditary predisposition of essential hypertension have been substantiated by several investigators.^{12, 13, 14} Animal experiments have indicated that hypertension accelerates the development of atherosclerosis in certain species. The Framingham, Massachusetts study which is concerned with those environmental and personal factors associated with the appearance and progression of cardiovascular disease in a cross-section of the population aged 30 to 59, has indicated that coronary artery disease is more prevalent in hypertensive individuals, the incidence being 98 per 1,000. The incidence in persons with normal blood pressure was found to be 26 per 1,000.

Inheritance factors in diabetes mellitus were investigated by Pincus and White.¹⁵ This investigation indicated that diabetes mellitus is transmitted through Mendelian recessive genes. Thomas and Cohen⁹ found that whether hypertension, coronary artery disease or diabetes is the index disorder, the

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others are more prevalent among affected than unaffected groups of individuals.

The study of familial xanthomatosis by Adlersberg, Parets and Boas¹⁶ supported the theory that abnormal lipid metabolism is transmitted as an "incomplete" dominant trait. This study of 201 persons indicated that the two most frequent abnormalities among members of xanthomatous families are elevated serum cholesterol and coronary atherosclerosis. Coronary artery disease was present in 40 per cent of the group.

An additional group of unselected patients with coronary artery disease under the age of 50 years was studied. The families of some of these unselected patients were studied and in 30 per cent of the families, all or most of the siblings had hypercholesterolemia. The conclusion was that the tendency of coronary artery disease to occur in several members of a family can be explained by a hereditary disturbance of lipid metabolism, often manifest as hypercholesterolemia. In addition, it was suggested that familial xanthomatosis is the most severe form of a hereditary disturbance of lipid metabolism.

Bloom, Kaufman and Stevens¹⁷ stressed that hypercholesterolemia rather than xanthomatosis is the principal manifestation of an inherited factor which produces, under certain conditions, cutaneous as well as cardiovascular disease. Thus, faulty genes may be directly concerned with the control of lipid metabolism and indirectly concerned with the development of coronary artery disease.

PHYSIQUE ASSOCIATED WITH CORONARY ARTERY DISEASE

Coronary artery disease has been found more frequently in "over weight" individuals. Goldsmith¹⁸ studied individuals with coronary thrombosis and found a mean deviation of 6.7 per cent from the average weight for height and age. Levine and Brown¹⁹ noted that the person with coronary artery disease is usually a strong, "well set person," muscular and somewhat overweight.

There is considerable disagreement as to what constitutes average weight for an in-

dividual; furthermore, obesity is not strictly hereditary. Since weight is not constant in any individual, it becomes a difficult variable to evaluate. Body type and anthropometric measurements are thought to be hereditary in nature and not subject to great changes. Hence, body type seems to be a more useful measurement.

Gertler and White,¹¹ using Sheldon's system of somatotyping²⁰ and anthropometric measurements, found the endomorphic mesomorphic person to be most prone to coronary heart disease. In the group affected by the disease, 44 per cent were found to be dominant mesomorphs and six per cent dominant ectomorphs. In contrast, 22 per cent dominant mesomorphs and 18 per cent dominant ectomorphs were found in the non-affected or control group. These findings tend to substantiate the observations of Levine and Brown as to the appearance of the person with coronary artery disease.

ASSOCIATION OF ABO BLOOD GROUPS

Since blood groups are genetically determined, attempts have been made to further assess the hereditary nature of coronary artery disease by associating the two. It has been noted that there are more blood group A individuals and fewer blood group O individuals affected by coronary artery disease than in non-affected or control groups of individuals.¹¹ Bronte-Stewart, Botha and Kurt²¹ in their investigation of people with electrocardiographic evidence of myocardial infarction found that the predominance of blood group A and B over O was maintained in individuals below 70 years of age. However, in the group with angina pectoris and no myocardial infarction, blood group distribution was not statistically different from the non-affected or control group. The presence of a specific blood group seems of questionable value in identifying the "candidate" for coronary artery disease.

ASSOCIATION OF VARIOUS PHYSICAL CHARACTERISTICS

Various physical characteristics of the individual with coronary artery disease have been observed. Some of these traits may or may not be genetically transmitted. Wrist

size, arcus senilis (arcus cornea), baldness, graying of hair and other traits have been associated with the individuals affected by the disease.

Wrist size has been said to be a measure of degree of mesomorphy. Arcus senilis, graying of hair and baldness, may be considered as signs of aging. Since endomorphic, mesomorphic individuals often appear older than their chronologic age, these characteristics might also be considered to be a measure of mesomorphy. Gertler and White,¹¹ however, found no significant difference in graying of hair and baldness between the group affected by coronary artery disease and the non-affected or control group. Arcus senilis was noted in only five per cent of the patients. From these data it would appear that such traits do not correspond to the degree of mesomorphy and that no statistical correlation between the traits and coronary artery disease exists. On the contrary, Pomerantz²² found a statistically significant association of arcus senilis and coronary heart disease in age groups below 55 years of age. Adlersberg, Parets and Boas¹⁶ found that arcus senilis was present in 18 per cent of coronary patients below age 50.

The interpretation of physical characteristics is highly subjective; perhaps this accounts for the varied statistical significance reported by different investigators.

DISCUSSION

Numerous problems are encountered in evaluating data on coronary artery disease. Most investigations in the past have been limited to the survivors of myocardial infarction, since the nature of the disease is such that first attacks are often fatal. Sample bias is obvious under these circumstances and it is difficult to determine whether certain factors existed before the disease or resulted from the disease process. Furthermore, it is difficult to separate genetic factors from environmental effects in the study of this disease. It could be argued that familial occurrence of coronary artery disease does not indicate genetic transmission but rather the effects of environmental and cultural factors. It could likewise be argued that physique may be altered by nutrition in the formative or early period of life. At

present there is no established or clarified mode of gene transference and degree of penetrance in this disease. The possibility of multiple genetic factors with modifying environmental agents as proposed by Thomas and Cohen⁹ is an appealing explanation for the hereditary nature of the disease. However, more investigation is needed to clarify the hereditary aspects. Systematic investigations of coronary artery disease in other series of identical and fraternal twins could aid in clarifying the role of heredity in this disorder.

As yet, no absolute method of identifying an individual who is a "candidate" for coronary artery disease exists. The presence of certain hereditary factors seems to increase the probability of the development of the disease. A brief discussion of some of these factors has been presented. □

ACKNOWLEDGMENT

The author wishes to thank Thomas N. Lynn, M.D., for his valuable criticism of this manuscript.

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800 N.E. 13th Street, Oklahoma City, Oklahoma

Enhanced Dissemination of Experimental Murine Cryptococcosis With Hodgkin's Serum

JOHN M. HALE, Ph.D.
RACHEL LOMANITZ

*Same serum factor present in
Hodgkin's serums adversely effects
the survival of mice infected with
cryptococcus neoformans.*

ABSTRACT

THE INCREASED susceptibility of patients with reticulo-endothelial involvement^{1, 2, 4} particularly Hodgkin's disease, to disseminated cryptococcosis stimulated the present study.

Sera from patients with a wide variety of abnormalities, ranging from severe burns to acute infections, to lymphomas, including Hodgkin's disease, were studied to determine their effect on dissemination of cryptococcosis in mice.

The results demonstrated that when organisms of a virulent strain of *Cryptococcus neoformans* were suspended in serum from patients with Hodgkin's disease and certain types of leukemia, the onset of death in mice inoculated intraperitoneally, was significantly enhanced. However, this enhance-

ment, in the case of the lymphoma sera, was completely nullified by inactivating the serum in a water bath at 56° C for thirty minutes, while the same procedure had no effect on the leukemia serum.

MATERIALS AND METHODS

Cryptococcus neoformans

A number of patient-isolates of *Cryptococcus neoformans* were obtained from the Oklahoma City V. A. Hospital. One strain, 45-466-59, was procured from C.D.C. in Chamblee, Georgia. All cultures were maintained on mycophil agar slants.

Animals

The animals used were white Swiss mice, three to four weeks old, with an average weight of 11 to 12 grams.

Preparation of organisms for inocula and for viable counts

Organisms were transferred from mycophil agar to two successive broth cultures. Counting of organisms was done from the second broth culture, which subsequently was used in the preparation of inocula.

Method for viable counts

Living *C. neoformans* cells are capable of reducing methylene blue dye to the colorless form, while dead cells remain blue. A small portion of the second broth culture was diluted three to one with 0.05M methylene blue prepared in physiological saline and visual counting was done under high power using

*This project was supported by American Cancer Society Institutional Grant Number 659, and by the Florence L. Fenton Memorial Grant for Cancer Research.

a Petroff-Hauser counting chamber. The results obtained by this method were checked against those obtained on the same cultures, at comparable times, by the plate dilution method. The difference was not statistically significant. Subsequently all counting was done by the direct method.

Mouse virulence studies

A number of isolates of *Cryptococcus neoformans*, most of them from patients, were studied to determine their virulence for mice. This was done by observing the number of mice killed, within three to four weeks, by intraperitoneal injection of a measured number of yeast cells, suspended in 0.5 ml of saline. Strain 45-466-59, hereafter referred to as "Y," was highly virulent (i.e., killed 12 out of 36 mice in 24 days) and was used in all subsequent studies. For comparison, a patient-isolate "J," of low virulence (i.e., killed three out of 36 mice in 24 days) was also used.

Dosage of yeast cells

Pilot runs were made on mice, varying the dosage from 7.5×10^5 to 3×10^6 organisms in 0.5 ml inoculum, using the same isolates checked for virulence. It was found that, within this range, the number of organisms injected intraperitoneally did not affect the rate of dissemination of cryptococcosis and that the death-rates within the interval set for the experiment (four weeks) could be reproduced.

PROCEDURES AND RESULTS

Testing various types of sera

Serum for preliminary testing was collected from patients with:

1. Cirrhosis of the liver

2. Acute haemophilia and uremia
3. Acute salpingitis
4. Leukemia (type not stated)
5. Acute tuberculosis

Cells of *Cryptococcus neoformans*, isolates "Y" and "J," were suspended in each of the above sera, as well as in pooled normal serum and physiological saline, the latter being used as controls. These suspensions were injected intraperitoneally in six mice. Each animal received an inoculum of 0.5 ml containing 7.5×10^5 organisms. Records were kept on death rates, as well as of the degree of dissemination of cryptococcosis. The latter was measured by the presence and concentration of organisms in the viscera, lungs and brain, as observed in wet smears suspended in India ink. In addition to the controls mentioned above, normal serum, which was obtained by pooling sera collected for blood bank serology and by combining sera collected from available laboratory personnel, physiological saline, and each of the pathological sera were used without organisms. The results of this first experiment indicated that it made no difference whether physiological saline, normal serum or any of the other sera was used as the diluent. None of the mice injected with serum in the absence of *C. neoformans* died during the course of any experiment.

Additional types of sera tested

The second group of sera included those from patients with:

1. Metastatic lung cancer
2. Lymphocytic leukemia
3. Lung cancer
4. Myelocytic leukemia
5. Cryptococcosis and leukemia

TABLE 1.

Distribution of deaths among 36 mice inoculated with *Cryptococcus neoformans* suspended in lymphomea serum (untreated vs. inactivated) by time of death in days.

Time of death (Days following inoc)	Midpoint of interval	Untreated serum		Inactivated serum	
		Deaths	Survivors	Deaths	Survivors
0-14	7.25	4	11*	0	18
15-29	22	10	1	13	5
30	30	1	0	3	2*
Total:		15		16	

*3 died within 24 hrs.
(not from Cryptococcosis)

*2 survived

Deaths—Average No. days. $\bar{x}_1 = 18.6$ days

$\bar{x}_2 = 23.5$ days

Pooled "t" = 2.4; $p < .01$ (one tailed)
(df=29)

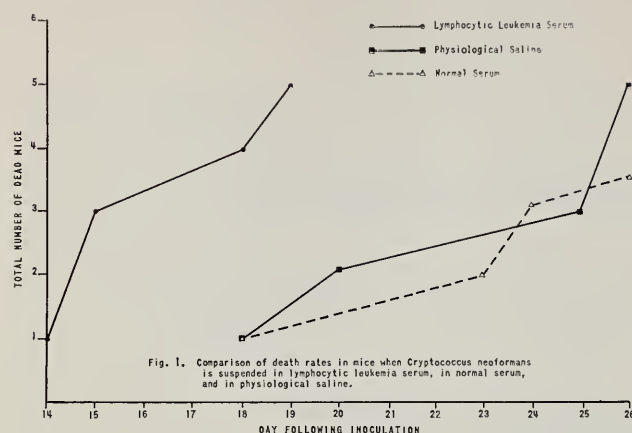


Figure 1

The procedure and controls in this case were the same as in the previous experiment. The onset of death was earlier and dissemination of cryptococcosis enhanced when "Y" strain was suspended in Serum No. 2 (lymphocytic leukemia) as compared with the same suspension in normal serum and in physiological saline (figure 1). This difference was not observable when "J" was used as an inoculum.

There was neither enhancement of dissemination nor earlier onset of death when organisms were suspended in the other four sera, regardless of *C. neoformans* isolate used.

Testing of lymphoma and related sera

The group of sera used in this experiment, seven in all, included:

- 2 Lymphomas
- 2 Lymphosarcomas
- 1 Acute lymphosarcoma
- 1 Lymphatic leukemia

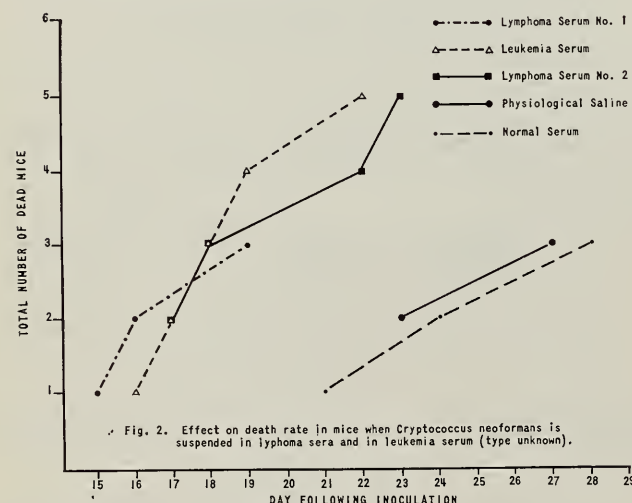


Figure II

1 Leukemia—type not stated

Again, procedures and controls were the same as in the previous experiments. This time it was observed that the onset of death in mice was advanced five to seven days when organisms of a virulent isolate were suspended in the two lymphoma sera, and in the serum of the patient with leukemia-type not stated, as compared with normal serum or physiological saline (figure 2). Enhancement of dissemination was decidedly more pronounced when lymphoma sera were used as diluents. The brains of these mice were heavily invaded at the time of the earliest deaths (days 15 and 16 following inoculation). At the same date, the brains of mice that had received organisms suspended in the leukemia serum showed only slight infiltration. By day 18, when the latter first manifested marked dissemination to the central nervous system, three-fourths of the mice receiving the organisms suspended in lymphoma sera had died.

Effect of inactivating the lymphoma sera

Once it was established that lymphoma sera advanced the onset of death by approximately five days, and enhanced the rate of dissemination of *C. neoformans* in mice, it was decided to determine the effect of inactivating the lymphoma sera. One difficulty frequently encountered in this study was that of obtaining a second serum from the same individual. Invariably, the patient had gone into remission and been discharged, was receiving vigorous chemotherapy, or had died. In one instance, a repeat was obtained. The sera included:

- 1 Lymphoma (previous patient)
- 2 Lymphomas (new patients)

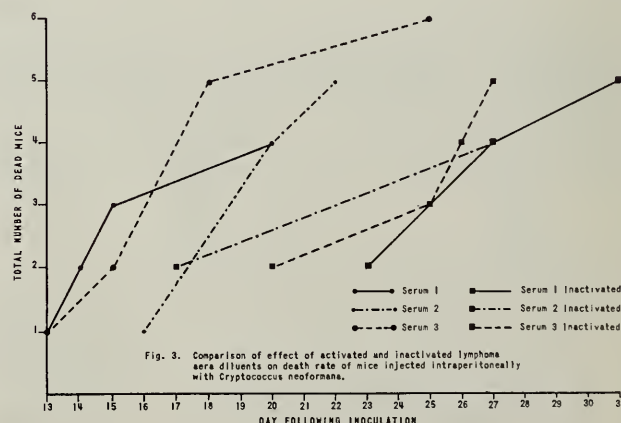


Figure III

- 1 Melanoma-leukemia pool
- 1 Leukemia pool
- 1 Leukemia (same patient as in previous experiment—type not stated)

Each serum was divided into two equal portions; one was inactivated (56°C for 30 minutes) and the other was used raw as the diluent. The procedure was the same as in previous experiments.

The results showed, in the case of all three lymphoma sera, that the "enhancing factor" was destroyed by inactivating the sera (figure 3). Statistical analysis on pooled sera, done by "students" t-test showed that the difference was highly significant, $p < .01$. See Table 1.

Figure 4 shows the normal serum control and the leukemia serum, which exhibited an enhancing effect. It is clear that in these cases inactivating the serum used as a diluent did not suppress dissemination of the infection; if anything, there appears to be a slight increase, though it is not statistically significant.

Figure 5 shows a composite chart of all three lymphoma sera used in this experiment, "raw" and inactivated. Here, too, the difference is highly significant.

DISCUSSION

The increased susceptibility of lymphoma patients to disseminated cryptococcosis is in keeping with the recent findings which demonstrate that these individuals, while being normal with respect to the production of humoral antibody, are poor, or even lacking, in the ability to develop delayed hypersensi-

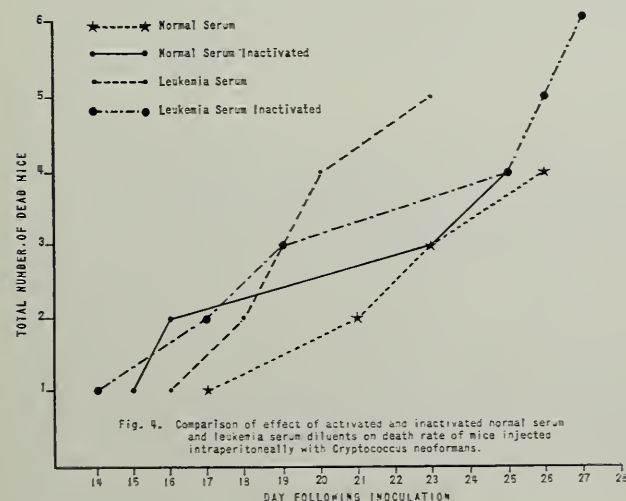


Figure IV

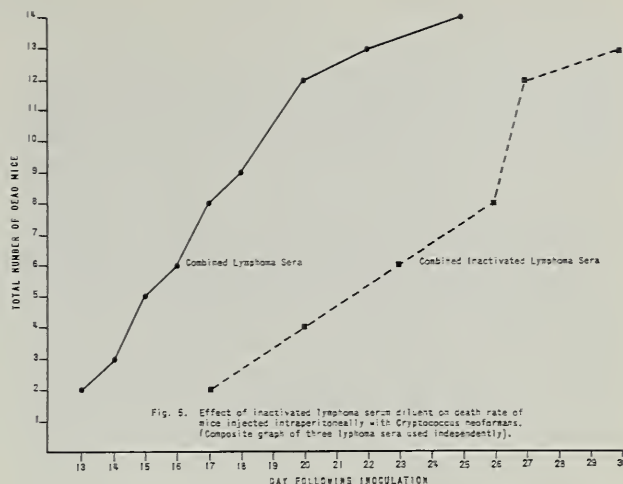


Figure V

tivity.³ In this connection, it is noteworthy that in the systemic mycoses, control of dissemination coincides with the appearance of hypersensitivity (delayed type) to the invading organism. In addition, recent immunologic studies carried out in this laboratory show that *Cryptococcus neoformans* does stimulate the development of delayed hypersensitivity, at least in experimental animals.

The "enhancing factor" in lymphoma serum still remains to be characterized. At the moment there is no experimental evidence as to the nature of this factor, except that it is heat labile. However, the most likely explanation is that the substance is either a product of abnormal metabolism, perhaps some unusual protein that counteracts the non-specific inhibitory action of normal serum against cryptococcus, or an as yet un-

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Doctor Hale is a member of the Sigma Xi, the New York Academy of Science, the Oklahoma Academy of Science, the Society of American Mycologists and the Society of Professional Biologists.

Rachel Lomanitz is presently completing the work for the Ph.D. in the Department of Microbiology at the University of Oklahoma School of Medicine.

identified viral agent. Such procedures as ammonium sulphate precipitation, dialyzing, electrophoretic mobility studies and passage of the raw serum through a bacterial filter prior to using it as a diluent, should shed some light on the subject. It would of course, be both exciting and supportive if the enhancing factor could be equated with the substance or agent responsible for the seriously impaired ability of lymphoma patients to develop delayed hypersensitivity. □

Doctor Everett Rhoades, Captain, U.S.A.F., is due sincere thanks for supplying many of the sera used in this project.

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800 N.E. 13th Street
Oklahoma City, Oklahoma

DOCTORS' HOBBY SHOW

OSMA Annual Meeting

Skirvin Hotel

May 1-3, 1964

AWARDS to be given to the best county exhibit and the best individual exhibit.

APPLICATION FOR HOBBY SHOW SPACE

Describe exhibit including size, shape, and value_____

Deliver exhibit to Skirvin Hotel after noon April 30th or early morning, May 1st. It will be attended by a member of the committee at all times. Insurance is provided. The transportation is your responsibility. Exhibits must be picked up by 5:00 p.m., May 3rd.—NO LATER!

Send Application to:

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ABSTRACTS

CARDIAC FINDINGS IN MUSCULAR DYSTROPHY

The cardiac findings in 73 patients with muscular dystrophy are reported in this paper. Cardiograms were obtained on 16 patients with Duchenne type muscular dystrophy. This type is characterized by its predominance in males, onset in the first four years of life, symmetrical involvement of the pelvic girdle, pseudohypertrophy in 80 per cent of patients, and steady progression to death. Of these patients only four had normal electrocardiograms. The most common abnormality was right ventricular conduction delay.

Electrocardiograms in four patients with fascioscapulohumeral dystrophy were essentially normal. This type occurs in both sexes with a variable age of onset. It begins in the face and shoulder girdle muscles and may be asymmetrical. Progression is slow and life expectancy is not decreased.

Twenty-six patients had the limb-girdle form. This type occurs in either sex, usually in the first or second decade but sometimes later. There is primary involvement of either the pelvis or shoulder girdle and progression is variable. Only seven of these patients had normal electrocardiograms. Three had a history of congestive failure, seven had sinus tachycardia and 12 showed right ventricular conduction delay. The age and duration of symptoms were similar to patients with the fascioscapulohumeral form, but the incidence of electrocardiogram abnormality was greater in the former type.

Dystrophia myotonica occurs in both males and females at any age. There is myotonia and early facial or peripheral weakness with wasting of the muscles of the extremity spreading to the proximal muscles. Progression is steady with death usually in middle life. Cataracts, testicular atrophy, and frontal baldness are frequently present. Of 27 patients with this disorder only nine had unequivocally normal electrocardiograms. Two patients had evidence of coronary artery disease. Prominent among the electrocardiogram abnormalities were sinus bradycardia, prolongation of the P-R interval and conduction defects of left ventricular origin. The latter observation contrasts with the predominance of right ventricular abnormalities in other types.

Cardiac Findings in 73 Patients With Muscular Dystrophy, Jack D. Welsh, Thomas N. Lynn, Gunter Haase, *Archives of Internal Medicine*, 112: 119-206, August, 1963.

THE IMPORTANCE OF CERVICAL CYTOLOGY

The authors report nine and one-half years' experience with 6,641 women over 20 years of age who had cervical cytology as part of the routine physical examination. Repeat smears were done on 4,666 women. In the first group there were 51 patients with positive cytology. These patients would not have had biopsies in the absence of a positive result. Of the 51 patients, nine had invasive carcinoma of the cervix, 35 carcinoma in situ, five carcinoma in situ of the vaginal mucosa, and there was one case each of carcinoma of the fallopian tube and carcinoma in situ of the endometrium.

Forty cases had abnormal cytology which ranged from 16 cases of squamocellular atypia to 12 cases of unexplained abnormal cytology. No positive reports occurred in the 4,666 patients who had repeat cytology.

Patients reported with cytology class I and II are considered normal and they are advised to return in one year. In those with class III reports, steps are taken to eliminate vaginal infection and trauma. If the cytology does not revert, they are treated like patients with class IV and V cytology. These patients receive a fractional curettage and cold knife conization of the cervix. Those with invasive carcinoma are treated with the author's usual method. Total abdominal hysterectomy is recommended for carcinoma in situ with the removal of a one to two inch vaginal cuff and leaving the ovaries. In young patients who have not completed their families, long term vigilance consisting of repeat cytology ever three months for one year and yearly thereafter, can be substituted. When pathologic examination of the conization specimen reveals atypical cells, repeat smears every three months for a year, twice yearly the next year and then once yearly thereafter, is used. In the latter two cases, if the smears become positive, reinvestigation and definitive treatment is indicated.

The authors point out that cervical cytology is not time-consuming nor is the cost prohibitive. It should be part of the routine examination of every woman over 20 years of age.

Office Cytology, Joseph W. Kelso, M.D., Joseph W. Funnell, M.D., *The American Surgeon*, 29: 212-215, March, 1963.

RECENT PUBLICATIONS

The Journal welcomes the opportunity to list current publications by any Oklahoma physician.

Hepatic Coma: Treatment Emphasizing Merit of Peritoneal Dialysis. Lester I. Nienhuis, *American Journal of Surgery*, Dec., 1963.

Colon Perforations in the Newborn, *The American Surgeon*, December, 1963.

Congenital Atresia of the Esophagus, W. R. Richardson, Irwin Brown, G. R. Williams, *The American Surgeon*, 29: 3, 166-178, March, 1963.

Foundations of Biostatistics, Ed Brandt, *Oklahoma Journal of Public Health*, 7: 7-12, July, 1963.

Body Temperature Regulation in the Normal and Cold Acclimatized Cat, T. Adams, *Journal Applied Physiology*, 18: 772, 1963.

Serum Protein Change in Response to Positive Tuberculin Skin Test in Humans, George C. Klein, Robert Patnode, *Proceedings of the Society for Experimental Biology and Medicine*, 113: 627-630, July, 1963.

Respiration and GSR as functions of White Sound in schizophrenia, V. Pishkin, D. Hershisier, *Journal Consult Psychology*, 27: 4, 330-337, 1963.

Reprints of most of the above publications are usually available on request from the senior author, c/o Mrs. Joan Campbell, Veterans Administration Hospital, 921 N.E. 13th Street, Oklahoma City, Oklahoma.

Dean's Message

As late as 1956 there were less than 50 persons working toward advanced degrees in the University of Oklahoma Graduate College division at the Medical Center. Today there are 177, and in the past decade the Medical Center has made a steady contribution to the supply of basic science teachers needed to help educate future physicians.

The first degree of Doctor of Philosophy in the Medical Sciences was awarded by our institution in 1955, four years after the program was initiated. Fifty-six of these degrees have now been conferred. One of the graduates is deceased. Of the remainder, at least 20 are presently affiliated with the Medical Center, and 12 others hold science teaching positions in other Oklahoma colleges. The majority are participating in some area of medical education here and elsewhere.

The latest development in the graduate program came in January of this year when authority was granted to award the Ph.D. in medical physiology, the fifth medical school department authorized to grant the degree in its specific field. Others are biochemistry, communication disorders, pharmacology and preventive medicine. Other departments of the School of Medicine also offer the more general degree of Doctor of Philosophy in the Medical Sciences.

Authorization of the medical physiology degree recognizes that the Department of Physiology has the faculty resources necessary to offer highly specialized training to graduate students and to prepare them to impart to future physicians the basic knowledge of processes in the human organism which are distorted in disease.

Expansion of the graduate program has been possible with very little increase in physical facilities and without additional cost to the graduate college of the university, partly because of collaborative work with related and affiliated institutions. For example, medical school faculty appointments are held by Oklahoma Medical Research Institute and Civil Aeromedical Research Institute scientists highly qualified in biochemistry, pharmacology, physiology, and preventive medicine.

The graduate offerings in the medical sciences have been extended at no expense to the teaching program for medical students. Present, as well as future medical students, who are dependent upon graduate schools for their pre-clinical teachers, benefit from the participation of graduate students in laboratory teaching and from the general strengthening of the basic science departments.

Mark R. Everett

THE ANNUAL MEETING: RENAISSANCE '64

'Return to Fundamentals Highlights Annual Meeting Program'

What better way to sharpen scientific skills, renew friendships, and catch a few well-earned days away from the old routine, than to attend the 1964 Annual Meeting of the Oklahoma State Medical Association?

And this year's meeting, set for May 1-3 in Oklahoma City, will be something special—Renaissance '64—an event you won't want to miss. It will be held Friday, Saturday and Sunday at the Skirvin Hotel and Skirvin Tower.

Several important changes in the usual annual meeting format have resulted from a special study committee's recommendations last year. First, the marathon House of Delegates meeting has been split into a two-day session, with the opening meeting scheduled for Friday morn-

ing, May 1st, and the closing session booked for the following morning. Reference committees of the House, which will receive and make recommendations on all reports and resolutions, will convene at 5:00 p.m. Friday evening.

The gap between the conclusion of the opening session of the House of Delegates (around noon) and the convening of the reference committees will make it possible for members of the House to attend the Friday afternoon scientific sessions. Also, since all business of the House should be completed by noon Saturday, policy-makers will be free to attend the important Saturday afternoon scientific program.

Continuity of programming will be another basic change in the 1964

annual meeting plans. General Chairman R. R. Hannas, Jr., M.D., Sentinel, and the program committee headed by Irwin H. Brown, M.D., Oklahoma City, have placed special emphasis on developing "coordinated" sessions for Friday and Saturday afternoons.

The two afternoon meetings, which provide the backbone of scientific activities, have been termed "A thoughtful return to fundamentals basic to modern medical practice."

Blood Pressure Mechanisms

From 1-5 p.m. Friday, a comprehensive course on blood pressure mechanisms will be featured.

Ben I. Heller, M.D., Professor and Head of the Department of Clinical
(Continued on Page 112)

"HEALTH PROTECTION WEEK" SET FOR APRIL 12th-18th

A comprehensive public information program—including press releases, TV and radio spot announcements, special programs, and posters for all physicians' waiting rooms (see cover)—will herald the OSMA's second annual observance of "Health Protection Week" during the period April 12th-18th, 1964.

In cooperation with the Oklahoma State Health Department, the OSMA Council on Public Health is following the directive of the House of Delegates which voted last May to continue the annual effort to improve the immunization status of Oklahomans against such illnesses as—smallpox, diphtheria, whooping cough, polio and tetanus.

The public information project will

be geared to acquaint Oklahoma families with the five diseases, the startling low level of immunization in the state and nation and the important necessity for citizens to visit their family physicians in order to bring their levels of protection up to date.

Waiting room posters and health record cards will be mailed to all OSMA members on April 2nd for use during the project. Hayden H. Donahue, M.D. Chairman of the OSMA Council on Public Health, said, "The posters are extremely good and essential to the success of the project, but top results can only be obtained by the physicians and their employees actually 'selling' immunization to all patients entering their offices."

Other promotions to be used include—possible radio tapes recorded by the popular TV series personalities Ben Casey and Doctor Kildare. These tapes, if secured in time, will be sent to the 57 radio stations in Oklahoma for use as spot announcements. Moreover, several television interviews are being arranged in cooperation with Oklahoma City television stations. Other sections of the state are expected to follow suit.

According to Doctor Donahue, " 'Health Protection Week' will go a long way toward not only educating the public on the value of safe, effective immunizations, but can serve as an effective public relations vehicle if all physicians cooperate in the program." □

(Continued from Page 111)

Pathology at the O.U. School of Medicine, will preside over the afternoon program, which will consist of:
1:00 p.m. "Factors Regulating Blood Pressure"

Francis J. Haddy, M.D., Professor of Physiology, O.U.

1:30 p.m. "Abnormal Blood Pressure"

Doctor Haddy

2:00 p.m. "Case Presentations"

Victor Rohrer, M.D., Presiding, Clinical Assistant in Medicine, O.U.

W. O. Smith, M.D., Associate Professor of Medicine, O.U.

Ben I. Heller, M.D., Professor of Clinical Pathology, O.U.

Gilbert S. Campbell, M.D., Professor of Surgery, O.U.

Joseph M. White, M.D., Professor of Anesthesiology, O.U.

3:05 p.m. "The Management of Ab-

normal Blood Pressure"

John P. Colmore, M.D., Associate Professor of Medicine, O.U.

3:45 p.m. "Panel: Blood Pressure Problems"

Doctor Heller, Presiding

Panelists: Doctors Colmore, Campbell, Haddy, White and Webb M. Thompson, M.D., Assistant Professor of Pediatrics, O.U.

Applied Basic Advances

Clinical application of recent developments in medical science will highlight the Saturday afternoon portion of the OSMA program. Scheduled from 1-5 p.m. in the Venetian Room of the Skirvin Hotel will be the following presentations, under the direction of R. R. Hannas, M.D.:

1:05 p.m. "The Diverse Clinical Manifestations of Porphyrin Metabolic Disorders — A Multiple System Disease"

Harold O. Perry, M.D., Mayo

Clinic, Rochester, Minnesota

1:45 p.m. "The Cell As It Is Known To Be—The Unit Membrane"

J. David Robertson, M.D., Assistant Professor of Neuropathology, Harvard Medical School, Boston, Massachusetts

2:50 p.m. "Pulmonary Circulation"

Gilbert S. Campbell, M.D., Professor of Surgery, O.U.

3:30 p.m. "Panel: Clinical Implications of the Above Subjects"

Moderator: Doctor Hannas

Panelists: Doctors Perry, Campbell, Robertson and C. G. Gunn, M.D., Associate Professor of Medicine, O.U.

Shirt-Sleeve Sessions

Saturday morning will provide opportunity for physicians to participate in informal workshop sessions devoted to dermatology, diagnostic radiology, laboratory procedures and office gynecology. From 9:30-11:30 a.m., the four separate meetings will be conducted simultaneously.

"Common Dermatological Problems" will feature audience-participation discussions on such subjects as tinea, psoriasis, allergic dermatitis, warts and other dermatoses, to be coordinated by Thomas E. Nix, Jr., M.D., (Moderator), Oklahoma City, Harold O. Perry, M.D., Rochester, Minnesota, Phyllis E. Jones, M.D., Oklahoma City, and William E. McCreight, M.D., Oklahoma City.

The "Diagnostic Radiology" session will feature the following presentations and speakers: "Plain Film Diagnosis of the Herniated Lumbar Disc"—Sidney Traub, M.D., Professor and Head of the Department of Radiology, O.U.; "Plain Film Diagnosis of the Acute Abdomen"—Donald G. Clements, M.D., Tulsa; "Bronchiolar Carcinoma"—E. H. Kalmon, M.D., Oklahoma City; "What's New in Pediatric Radiology"—Charles E. Shopfner, M.D., Associate Professor of Radiology, O.U., Oklahoma City; and a "Problem Film Clinic" where registrants may discuss their own films with the panel of lecturers.



Center of annual meeting activities for the OSMA's 1964 session, scheduled for May 1st-3rd, will be Oklahoma City's popular Skirvin Hotel and Skirvin Tower. Excellent room accommodations are available for physicians at the Skirvin Tower, Broadway at Park Avenue, or at the nearby Huckins Hotel, Broadway at Main, or at the Sheraton-Oklahoma Hotel, Sheridan at Harvey. Physicians should write directly to the hotels for reservations.

"Office Gynecology" offers presentations on: "The Sterile Couple"—Earl M. Bricker, Jr., M.D., Oklahoma City; "The Use of Pessaries"—Robert W. Dean, M.D., Tulsa; "Diagnosis and Treatment of Vaginal Discharge"—Farris W. Coggins, M.D., Oklahoma City; and, "Cytology"—Walter K. Hartford, M.D., Oklahoma City.

"Clinical Laboratory Tests" will be a two-hour curbside consultation on the reliability, interpretation and justification of clinical laboratory tests. Problem cases and new and old techniques will be discussed by a panel consisting of Raymond F. Hain, M.D., Oklahoma City; Jess D. Green, Jr., Bartlesville; Jess Hensley, M.D., Assistant Professor of Pathology, O.U.; and Theodore W. Violett, M.D., Oklahoma City.

Motion Picture Clinic

On Friday morning, May 1st, program committee member M. Joe Crosthwaite, M.D., has planned motion picture clinics to be held simultaneously in meeting rooms on the second and fourteenth floors of the Skirvin Hotel.

Subjects include "Resuscitation of the New-Born," "Essentials of Neurological Examinations," "Current Trends in the Clinical Management of Diabetes," "No Real Pathology," and "The Essentials of External Cardio-Pulmonary Resuscitation" (which will be accompanied by a practice manikin).

Business Side of Medical Practice

For the bedraggled doctor-entrepreneur, a two-hour program is offered

One of America's top entertainment groups, Joe Reichman and his orchestra, will headline the OSMA's main social event of the year, the Annual President's Inaugural Dinner-Dance on Saturday night, May 2nd, at the Skirvin Tower's beautiful Persian Room. Tickets for the social hour, prime rib dinner, and dance are now on sale at the bargain rate of \$7.50 each.

on Sunday morning, May 3rd, from 10:00 a.m. until noon in the Venetian Room on the fourteenth floor of the Skirvin Hotel.

"The Business Side of Medical Practice" will feature a two hour teaching-audience participation session presented by Clayton L. Scroggins, Cincinnati, Ohio professional business consultant.

Mr. Scroggins operates the 17-year-old professional practice management firm bearing his name. He is

a graduate of Ohio Wesleyan University, an Editorial Consultant for *Medical Economics Magazine*, author of articles for *Medical Economics*, the *Journal of the AMA* and *AMA News*, and a popular lecturer to medical groups and medical schools. He is a past-president of the National Society of Professional Business Consultants.

The speaker will make presentations on "Increasing Productivity," "Personnel Management," and "Association Practice vs. Solo and Group Practice," plus general remarks related to good business management practices. Question and answer sessions will follow each formal presentation.

Peter E. Russo Memorial

Sunday morning program plans also include an unusual diversion from ordinary annual meeting features. In honor of the late president-elect of the OSMA, Peter E. Russo, M.D., Oklahoma City, the First Annual OSMA Conference on Medicine and Religion will be conducted from



Last Call For Resolutions

Marshall O. Hart, M.D., Speaker of the OSMA House of Delegates, has reminded all county medical society officers that April 1st is the cutoff date for receipt of resolutions to be considered by the House of Delegates on May 1st and 2nd. Moreover, he suggested that county leaders appoint local resolutions committees to draft resolutions for approval of the county societies at their regular March meetings.

As resolutions from county societies and individual members are received at the OSMA headquarters office, they will be mimeographed and mailed to all county society presidents, thereby permitting local groups to instruct or advise their official delegates in advance of the annual meeting. All resolutions and committee reports received prior to the publication deadline of the April Journal will be published therein.

8:00 a.m. until 9:30 a.m. in the Persian Room of the Skirvin Tower.

The Speaker of the AMA House of Delegates, Milford O. Rouse, M.D., Dallas, Texas, will present medicine's viewpoint toward "treatment of the whole man—mental, physical, social and spiritual."

Presenting the ministers' views will be Chaplain Armen Jorjorian, St. Luke's Episcopal Hospital, Houston, Texas.

Promotional plans for this important session of the annual meeting call for issuing an open invitation to the general public as well as to clergymen and the medical profession. The morning program will be preceded by brief devotional services.

Allen E. Greer, M.D., Oklahoma City, and his OSMA Medicine and Religion Committee, are in charge of arrangements.

Inaugural Dinner-Dance

OSMA's presidential gavel will change hands on Saturday night at the Skirvin Tower's Persian Room when Harlan Thomas, M.D., Tulsa, succeeds Joe L. Duer, M.D., Woodward, as president of the association.

The event will begin at 6:30 p.m. with an association-wide social hour and reception, to be followed by the dinner and inaugural ceremonies at 7:30 p.m., and by dancing to the delightful tunes of the nationally famous Joe Reichman Orchestra at 9:00 p.m.

Even non-dancers will want to stay for the show provided by the favorite of the Waldorf Astoria in New York, the Palmer House in Chicago and the Mark Hopkins and Fairmont Hotels in San Francisco. In addition to his masterful role as bandleader, Joe Reichman is a brilliant humorist and has been called the "Pagliacci of the Piano."

Tickets for the entire evening—which cover the cocktail party, dinner, and dance—are now on sale at the OSMA headquarters building,

Box 18696, Oklahoma City, at \$7.50 per person.

Other Events

Rounding out the three-day medical spectacular are the following events:

—The OSMA Board of Trustees will meet at 1:00 p.m., April 30th, in the Venetian Room of the Skirvin Hotel, for its annual session.

—The Woman's Auxiliary to the OSMA will conduct its annual meeting simultaneously with the OSMA event, and will again sponsor the popular "Physicians' Hobby Show" which can be seen throughout the meeting on the second floor of the Skirvin Hotel.

—The Oklahoma Medical Political Action Committee has scheduled a Sunday luncheon, May 3rd.

—Specialty societies, such as the Oklahoma Chapters of the American College of Chest Physicians and the American College of Surgeons, have arranged special meetings, and other groups are expected to follow suit. □

Association of Blood Banks to Meet In Oklahoma City

The Sixth Annual Meeting of the South Central Association of Blood Banks will convene in Oklahoma City's Skirvin Hotel on March 27th. The two-day session is open to all members of the medical profession, administrative or technical personnel and members of biological or chemical sciences interested in blood banking.

An outstanding program featuring fourteen prominent speakers from over the nation will be offered. Topics to be covered include: "Platelet Transfusions: Plasmapheresis and Plateletpheresis as a Routine Operation in a Children's Hospital Blood Bank," "Heart-Lung Machines, Blood Primes and Blood Substitute Primes," "Open Heart Surgery Eliminating the Need for Fresh Heparinized Blood," "NIH Standards—Cur-

rent Changes and Future Trends," "Survey of the Education Program of the American Association of Blood Banks," "The South Central Clearinghouse," "The National Clearinghouse," "Insurance with a Complete Blood Bank Laboratory Form," "Relative Merits of Glass Containers and Plastic Bags for Blood Transfusion," "The Inter-relationship of Serum Immunoglobulins and Isohemagglutinins," "Modern Concepts of Immunology" and "The Hepatitis Viruses of Man: Current Status of Tissue Culture Studies and Serological Detection."

A technical workshop will be conducted the final afternoon of the meeting.

Complete details of the program may be secured from Mrs. Florence Del Prete, Secretary, South Central Association of Blood Banks, 3600 Gaston Avenue, Dallas 10, Texas. □

Oklahoma Plastic Surgeons Organize

Oklahoma's plastic surgeons have formed a new organization to be known as The Oklahoma Society of Plastic Surgeons, Inc.

Purpose of the group is to encourage and stimulate research, teaching as applied to the specialty, and guidance in practice, according to Robert A. McLauchlin, M.D., Secretary-Treasurer, Oklahoma City. Plans are being formulated for an annual meeting in March.

Officers and Directors Named

In addition to Doctor McLauchlin, other officers named are: Gilbert L. Hyroop, M.D., President, Oklahoma City; George H. Kimball, M.D., Vice-President, Oklahoma City; and James Kelley, M.D., Historian, Tulsa.

Serving as directors of the organization are the officers and Hubert M. Anderson, M.D., Oklahoma City; John F. Burton, M.D., Oklahoma City; Jim G. Duckett, M.D., Oklahoma City; Herbert J. Forrest, M.D., Tulsa; William J. Forrest, M.D., Oklahoma City; and Herbert Kravitz, M.D., Oklahoma City. □

"Operation Waiting-Room" Produces Ten Thousand Letters A Day!

If members of the Oklahoma State Medical Association are responding to the Council on Public Policy's "Operation-Waiting Room" project, there are 10,000 letters arriving in the offices of Oklahoma's Congressmen and Senators every day, voicing opposition to H.R. 3920, the Medicare Bill.

The reception room poster, "What Does Medicare Offer You," and the accompanying folder, "Take A Look At Medicare," will do an effective job if given even a token push by physicians and their employees. Five letters a day from every OSMA member's office will produce 10,000 a day collectively.

Actually, the volume of mail resulting to date from the special promotion is not known, but many county medical society officers and committeemen are reporting excellent cooperation from physicians and enthusiastic response from friends and patients. While the OSMA is undoubtedly far short of the optimum goal, there is good reason to believe that an effective letter-writing program is underway.

"The public will recognize the fallacies of the Medicare scheme and take action," says Doctor Rex Kenyon, Council on Public Policy Chairman, "if we doctors will first educate ourselves, then take on the responsibility of discussing the issue with our non-medical friends at every opportunity.

"There are many ways to accomplish our objective of raising a massive ground swell of opposition to H.R. 3920," he continued, "but 'Operation Waiting-Room' is believed to be the most convenient and direct method."

"Operation Hometown"

The AMA's more comprehensive grass roots campaign program, "Operation Hometown," is also making progress in many county medical societies.

Special kits for county chairmen have been mailed from OSMA headquarters, and follow-up materials will be supplied as warranted by the situation. Despite excellent cooperation, generally, Doctor Kenyon reports that a few county society presidents have not yet reported their Legislative Committee chairmen, and the program is stymied in certain areas for this reason.

"'Operation Hometown' is nothing to shy away from," Kenyon says. "It is a simple program, neatly subdivided to facilitate the delegation of responsibility, and the kit contains many helpful aids to keep the program from occupying too much of any individual's time. Once the chairman parcels out the materials to six subcommittee chairmen (for letter writing, congressional contact, materials distribution, speakers bureau, liaison with other groups, and press relations), it then becomes a simple problem of bringing the team captains together routinely to keep interest up and the program alive."

Kenyon points out that the "Operation Hometown" program will obviously have to be tailored to the particular needs in a given county, and no county society is being asked to "buy the whole package."

Outlook

The House Ways and Means Committee will reportedly vote on H.R. 3920 during the month of March, and there is an air of optimism in the AMA camp that it will be killed in committee for the time being. However, the outcome of the vote should not bring a halt to the public education efforts of organized medicine, because the political considerations of an election year and the de-

Professional Liability Conference Held

The mounting problem of professional liability lawsuits against Oklahoma physicians brought county medical society leaders and members of the OSMA Board of Trustees together with insurance company officials on March 8th, when the Council on Insurance of the association conducted a special conference in Oklahoma City. About fifty physicians registered

John M. Campbell, Assistant Secretary of the St. Paul Fire and Marine Insurance Company, appeared on the program with Don Clifford, superintendent of the company's claim department. They discussed the background and revealed the ten-year experience of the association-approved carrier, which has been unfavorable in recent years.

Claims reporting and processing, the establishment of reserves for losses, out-of-court settlements vs. courtroom defense, and the "climate" for malpractice claims in Oklahoma were among the other subjects covered by speakers.

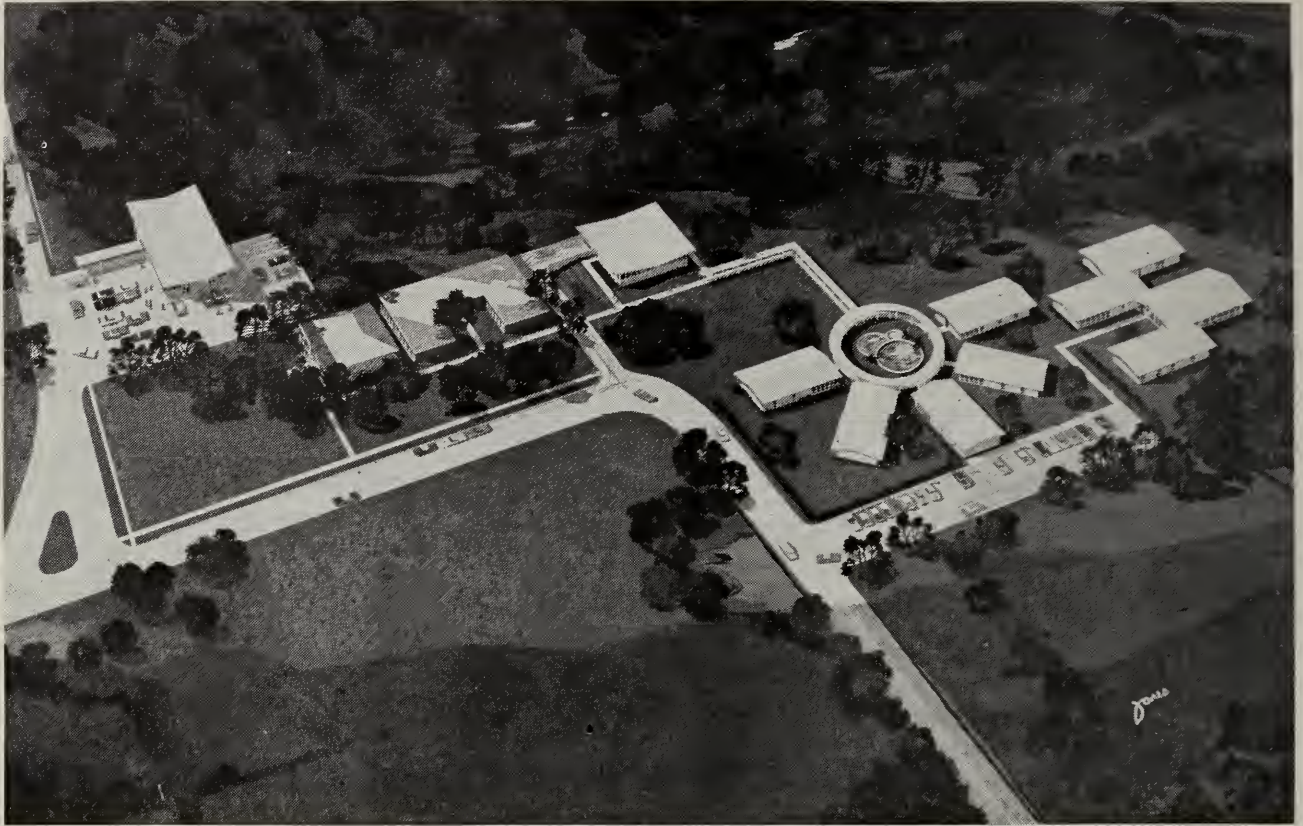
Attorneys and local employees of the St. Paul Company were featured speakers, and the physicians also heard from OSMA president Joe L. Duer, M.D., and from Dave B. Lhevine, M.D., whose OSMA Council on Insurance cooperated with the insurance company in organizing the program.

Following the meeting and a dinner for all registrants, the Council on Insurance huddled with insurance company executives to map out a claims prevention program to reduce the number of unmeritorious claims, and to consider the adequacy of present insurance rates.

The Council on Insurance will report more fully on the meeting to the House of Delegates and to the membership through subsequent issues of the Journal. □

terminated attitude of opponents are sufficient reasons to make Medicare legislation a constant and continuing threat. □

Extra quantities of the OSMA folder, "Take A Look At Medicare," are available at cost from the OSMA Executive Office, Box 18696, Oklahoma City. The price is \$1.00 per 100 folders, shipped prepaid.



Announcing Move

The Beverly Hills Hospital The Beverly Hills Clinic

(Formerly Beverly Hills Clinic and Sanitarium)

Acute Psychiatric Diagnostic and Treatment Center

☆ New Outpatient and Hospital Facilities ☆ Beautiful New Buildings On a Secluded Scenic and Wooded Site ☆ Open Cottage System and Regulated Intensive Treatment Units ☆ All Established Methods of Diagnosis and Treatment Utilized. ☆

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PSYCHIATRY

Joseph H. Lindsay, M.D.

John T. Holbrook, M.D.

PSYCHOLOGY

Traudi E. Jordan-Diener, Ph.D.

W. R. Garretson, M. A.

1353 N. Westmoreland



Dallas 11, Texas



FE 1-8331

General Practitioners Meet in Tulsa



Oklahoma's Chapter of the American Academy of General Practice met in Tulsa, February 3rd and 4th, 1964 in the Mayo Hotel. Over 400 physicians and their wives attended the two-day convention.

Pictured above (left to right) are: C. Riley Strong, M.D., El Reno, who was named President-Elect of the group; Arnold G. Nelson, M.D., Midwest City, Vice-President; Nolen Armstrong, M.D., Oklahoma City, retiring President; Thomas Taylor, M.D., Tulsa, who was installed as President; and, Albert Ritt, M.D., St. Paul Minnesota, National President of the A.A.G.P., who was keynote speaker at the annual banquet. Seated (left to right) are: Mrs. C. Riley Strong, Mrs. Arnold Nelson, Mrs. Nolen Armstrong and Mrs. Thomas Taylor. Newly elected Secretary-Treasurer, not pictured, is Howard Mauldin, M.D., Oklahoma City.

Attendance Of Regional PG Courses Runs Far Ahead of 1963's

To date, Regional Postgraduate Education Courses have been held in Ada, Altus, Lawton and Bartlesville. Combined total registration hit 156 physicians as compared to 109 registrants attending last year's first four courses—an increase of 45 participants or a 41 per cent gain.

While one-half of the scheduled courses have been conducted, four remain to be held. The next course is scheduled for March 24th in Durant, Oklahoma. The meeting will be held at Dunn's Steak House and the educational subject to be covered is "The Central Nervous System." The Durant course was originally scheduled for Texhoma Lodge,

but had to be changed as a result of management conflicts at the lodge.

In addition to the March 24th course, the following regional postgraduate meetings are to be conducted on the following dates, with corresponding subjects offered and at the location indicated:

March 31—"The Central Nervous System"—Woodward.

April 21—"The Colon"—Enid.

April 28—"The Pancreas"—Miami.

The remaining programs will begin at 4:30 p.m. with two hours of lecture followed by dinner and another two-hour period of lecture and discussion. A registration fee of \$7.50 covers dinner and the scientific program. Pre-registration can be made by mailing a check to the OSMA Executive Office—designating the location of the course preferred. □

Automotive Crash Injury Study Underway in Oklahoma

On July 14th, 1963, the Board of Trustees of the Oklahoma State Medical Association endorsed an Automotive Crash Injury Research program sponsored by the Cornell Aeronautical Laboratory, Inc., of Cornell University. The OSMA Council on Public Health requested the endorsement and since July 14th, the Council has been cooperating in the study, along with the Oklahoma State Health Department, Oklahoma State Highway Patrol and the Oklahoma State Hospital Association.

The purpose of the research study is to obtain reliable data on the frequency, nature, and specific causes of injury to occupants of passenger cars and trucks involved in accidents. Medical data submitted by physicians treating accident victims is matched with information on injury causes and accident data supplied by state patrol officers and is submitted to Cornell for analysis and statistical tabulation.

To obtain an adequate volume of representative cases without imposing too great a load on any single individual or group, the study calls for the rotation of ten sampling areas over a two and one-half year period. The ten areas correspond to the Oklahoma Highway Patrol districts.

Since January 1st, 1964, active case research studies have been underway in Highway Patrol districts four and seven and will continue through June 30th. Districts four and seven are comprised of the following Oklahoma counties: (Four) Caddo, Comanche, Tillman, Jackson, Cotton, Jefferson, Stephens and Grady; (Seven) Kay, Osage, Noble, Pawnee and Payne.

According to a recent report to the OSMA from Mr. John R. Fitzgerald, Field Representative for Cornell Aeronautical Laboratory, "Case studies in Oklahoma since January 1st, are producing medical statistics which promise to improve treatment of auto crash victims

through more definite knowledge of the nature and scope of the problem. The Trauma Committee of the American College of Surgeons has expressed great enthusiasm over this project."

The automotive crash injury spokesman commended Oklahoma physicians for their unselfish cooperation thus far in the project and stressed the time Oklahoma physicians had taken to complete accident questionnaires.

Mr. Fitzgerald told OSMA staff executives he would supply a more comprehensive report in the next few months. □

Trustees to Meet On March 22nd

OSMA President Joe L. Duer, M.D., has announced a special meeting of the Board of Trustees of the Oklahoma State Medical Association, to be held on March 22nd at 4:30 p.m. in the Holiday Inn, U.S. Highway 81 (south), Enid, Oklahoma.

The principal purpose of the meeting will be to discuss recent developments in connection with the association-approved professional liability insurance program (see article on page 115). However, other matters

of immediate importance will also be presented.

During the meeting of the Council on Insurance, March 8th, it was requested that a policy-level decision be expedited in advance of the next scheduled meeting of the Trustees (April 30th). □

New OSMA Committee Appointed

The appointment of a new OSMA Committee on Interprofessional Relations was announced recently. Under the chairmanship of Orange M. Welborn, M.D., Ada, the Committee will be comprised of the following individuals:

Maxwell A. Johnson, M.D., Tulsa; Frank W. Clark, M.D., Ardmore; Walter H. Dersch, Jr., M.D., Shattuck; Fred W. Becker, M.D., Altus; Francis R. First, M.D., Checotah; P. D. Casper, M.D., Midwest City; Francis A. Davis, M.D., Shawnee; and, Thomas C. Points, M.D., Oklahoma City.

Among the problems to be explored by the new committee are: osteopathic relations, relations with other professional and paramedical groups, physician ownership of pharmacies, and the chiropractor problem.

Doctor Welborn and R. R. Hannas, M.D., OSMA Vice-President, attend-

ed the AMA Congress on Medicine and Pharmacy, March 12th and 13th, in Chicago. □

Oklahoma City Attorneys Represent Professions Before IRS

Two Oklahoma City tax attorneys, Messrs. Edwin Burch and John Speck, appeared on behalf of Oklahoma professional groups before a public hearing conducted recently by the Internal Revenue Service.

IRS has proposed new regulations which will, in effect, destroy the value of Oklahoma's Professional Corporation Act (Oklahoma Legislature, 1961). In brief, the federal officials have said that a professional corporation cannot hope to meet the definition of a regular business corporation, and cannot, therefore, be given any tax advantages. At stake in the argument is whether or not professional people are to be able to establish tax-deferred pension plans as businessmen have long been able to do.

The Oklahoma State Medical Association and other professional groups have filed a joint statement in opposition to the proposed regulations. More than four hundred persons appeared at the IRS hearings to object to the arbitrary ruling. □



COMING YOUR WAY

"Renaissance '64" . . . A new look Annual Meeting of the Oklahoma State Medical Association. Featuring two all-afternoon courses on blood pressure mechanisms and applied basic advances, plus four shirt-sleeve short courses, medical motion pictures, a big bonus program on the business side of medical practice, and other outstanding events. Added extras: President's Inaugural Dinner-Dance, specialty society meetings, hobby show, technical and scientific exhibits, memorial program on medicine and religion and many others.

Read about Renaissance '64 in this Journal and in next month's special issue. Plan to attend, doctor.

**Watch For The April Issue
OSMA Journal**

DEATHS

FLOYD S. NEWMAN, M.D.
1906-1964

Floyd S. Newman, M.D., 58-year-old Shattuck physician, died in Oklahoma City February 14th, 1964.

Doctor Newman and his two surviving brothers, Doctors Roy E. and M. H. Newman, jointly operated the hospital founded in Shattuck by their father O. C. Newman, M.D., about 50 years ago.

A 1931 graduate of the University of Tennessee School of Medicine, Doctor Newman's specialty was E.E.N.T.

ERNEST B. DUNLAP, M.D.
1881-1964

A pioneer Lawton physician and surgeon, Ernest B. Dunlap, M.D., died in Atlanta, Georgia February 18th, 1964. The retired physician practiced medicine over 50 years, primarily in Lawton.

Born in Eden, Alabama, July 24th, 1881, Doctor Dunlap graduated from the University of Alabama School of Medicine in 1906. In 1908, he became associated with his father, the late P. G. Dunlap, M.D., in Lawton. Doctor Dunlap was a member of the first class to be examined for a license to practice medicine in Oklahoma.

Recognizing his years of professional service, the Oklahoma State Medical Association had presented Doctor Dunlap with a Life Membership and a Fifty-Year Pin.

JOHNNIE ANDREW ORBIN, M.D.
1928-1964

Johnnie Andrew Orbin, M.D., Oklahoma City physician, died February 9, 1964.

The 36-year-old general practitioner was born in Tulsa. In 1957 he graduated from the University of Oklahoma School of Medicine. His practice was established in Oklahoma City a year later.

ERNEST W. REYNOLDS, M.D.
1888-1964

Tulsa obstetrician, Ernest W. Reynolds, M.D. died in Tulsa February 21st, 1964.

A native of Leoti, Kansas, the 75-year-old, semi-retired physician was a graduate of the University Medical College of Kansas City. Doctor Reynolds practiced for 32 years in Bristow before moving to Tulsa.

Doctor Reynolds was presented a Life Membership in the Oklahoma State Medical Association in 1956 in appreciation for his loyalty to the profession. □

HOWARD L. HENNESSEY, M.D.
1924-1964

Howard L. Hennessey, M.D., Midwest City physician, died March 1st, 1964.

The 39-year-old doctor was a native of Okarche, Oklahoma and graduated from the University of Oklahoma School of Medicine in 1954. After taking his internship at Mercy Hospital in Oklahoma City, Doctor Hennessey established his practice in Midwest City.

DANIEL L. PERRY, M.D.
1900-1964

Daniel L. Perry, M.D., 63-year-old retired Tulsa physician died January 28th, 1964 in San Diego, California.

A native of Greenwood, Arkansas, Doctor Perry graduated from the University of Oklahoma School of Medicine in 1926. He practiced in Cushing, Oklahoma from 1927 until 1941 when he entered the United States Army Medical Corps. Following his service he joined his brothers, Doctors Hugh, Fred and James T. Perry in practice in Tulsa.

In recognition of his service to the profession, the Oklahoma State Medical Association awarded Doctor Perry a Life Membership in 1952. □

BOOK REVIEWS

SYNOPSIS OF NEUROLOGY, by Francis M. Forster. St. Louis, Missouri, The C. V. Mosby Company, 1962, pp. 223, \$6.75.

This concise, *Synopsis of Neurology*, by a well-known neurologist presents in logical sequence a brief, succinct, description of the common as well as the unusual problems in neurology.

The first three chapters are devoted to the evaluation of the patient with neurological disorder. A step by step description of the neurological history and examination as well as the utilization of the clinical diagnostic tests is presented.

Part 2 of the synopsis consists of descriptions of the more common disorders such as vascular disease, headache and epilepsy. Other disorders of the central nervous system are also described. The disorders are presented in a uniform style.

A rather complete and useful index as well as authoritative references follow each chapter as sources for further reading. All in all, the synopsis fulfills the objective of a neurologist who has indeed compiled a synopsis of neurology.—J. T. Jabbour, M.D. □

THE SKIN: A HANDBOOK, by Richard L. Sutton, Jr., Garden City, New York, Doubleday & Company, Inc., 1962, pp. 350, \$4.95.

This volume represents the effort of a prominent dermatologist and author to translate into simplified language a dermatological text. The volume preserves completeness to the point of covering rare and obscure disorders of skin and yet discusses these problems in essentially non-technical language. However, the very completeness renders it unsuitable for laymen since although the language is not technical the subject is. Hence the book may be useful in ancillary medical fields

(Continued on Page 120)

Book Reviews

(Continued from Page 119)

(nursing, psychology, etc.) but would be too difficult for non-medical persons and too casual for physicians.—
Mark A. Everett, M.D. □

STRECKER'S FUNDAMENTALS OF PSYCHIATRY, by Manuel M. Pearson. 6th edition. Philadelphia, Pennsylvania, J. B. Lippincott Company, 1963, pp. 274, \$6.75.

The emphasis in this book is toward eliminating body-mind dualism in the thinking of physicians. The book is easily read and its content emerges from lecture material presented to medical students. Thus the reader is made aware of concepts useful to the general practitioner and to those interested in the so called "psychosomatic" illnesses.

Among the sixteen chapters are sections of descriptive nosology of the mental illnesses as well as units dealing with such subjects as psychodynamics, drug treatment, psychotherapy, disasters and methods of examination. In addition the reader is given material to illustrate the general scope of mental problems in relation to medical practice and to social ills.

There are few and relatively unimportant corrections. For instance, on page 204 a footnote reference is inaccurately cited in regard to insulin therapy. Some psychopharmacologists would expect, even in so brief a review, that the physician be made aware of more distinctions between an antidepressant and a psychic energizer.

All told the book is very fine. It serves as a good redaction of clinical psychiatry. It serves also as a good means to bridge general medicine and the specialty of psychiatry. It can be recommended to practitioners, medical students and residents.
—*Chester M. Pierce, M.D.* □

IMMEDIATE opening for General Practitioner. Practice established. Fine office space available. New hospital open only to M.D.s. Assume practice at no obligation. Contact Norman A. Cotner, M.D., Grove, Oklahoma.

G.P. INTERESTED in general surgery, available for practice October 1, 1964. Graduate of University of Iowa School of Medicine. Medical service completed. Contact William E. Hall, M.D., 1022 Callanan Dr., Des Moines, Iowa.

COMPLETELY EQUIPPED general practice available in Norman, Oklahoma. Office equipment including x-ray and ECG for sale; clinic building for lease; patient records available. Equipment and building available due to unexpected death of Robert Ryan, M.D. If interested, contact Mrs. Robert Ryan, 1017 Jenkins, Norman or Grady Ryan, M.D., Box 97, Lindsay, Oklahoma.

AVAILABLE July 1, 1964, 1959 graduate of the University of Texas. Residency in Ob-GYN. Contact Joe Don Hughes, M.D., 1128 Winnie, Galveston, Texas.

OPENING for GP in established practice, northwest Oklahoma City. Large office space, share reception room with two other doctors. Excellent opportunity. Contact David A. Campbell, M.D., 2733 W. Britton Rd., Oklahoma City.

FOR SALE: X-Ray Patrician 200 MA with all accessories except motor drive. Attractive, well cared for, and efficient machine, two years old. Discount of 30 per cent off 1961 price. \$1,000 down, will finance balance, including installation, if desired. Contact Key A, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

BIG SAVINGS on "Returned-To-New" and surplus equipment. Reconditioned, refinished, guaranteed. X-Ray, examining tables, autoclaves, ultrasonics, diathermies, or tables, or lights, and more. Largest stock in the Southwest. WANTED: Used Equipment. TeX-RAY Co., 3305 Bryan, Dallas. (Open to the profession Wednesdays, Thursdays, 9-5. Other hours by arrangement.)

EXCELLENT opportunity for General Surgeon and General Practitioner in established group. Ideal community for family. Contact W. S. Harrison, M.D., The Chickasha Clinic, Chickasha, Oklahoma.

CLINIC BUILDING for lease, 1250 square feet floor space, air-conditioned. Located Pryor, Oklahoma. Open hospital available. Contact Warren G. Gwartney, M.D., 2570 South Harvard, Tulsa, Oklahoma.

IDEAL opening for young doctor in well established medical clinic, sharing reception room and equipment with three other doctors. Wonderful location on North May Avenue, Oklahoma City. Contact Frank D. Thompson, 3115 N. Pennsylvania, Oklahoma City, JA 5-5700 or JA 4-9552.

WANTED M.D., all phases of practice with thriving, completely equipped clinic. Industrial area in North Texas with 90 per cent hospitalization and medical insurance coverage. Start on salary or percentage basis. Write Key C, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

GENERAL practitioner, age 34, desires associate general practitioner in South Oklahoma City. Supportive salary and/or percentage until established. Contact Key M, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

March should be followed by an exclamation point. All over the state Doctors' Day plans are in final stages; large and small auxiliaries look forward to this annual opportunity to honor our doctor husbands with dinners, exhibits, science fairs, special favors on hospital trays, and red carnations in abundance.

We have several times in the past referred to the origin of Doctors' Day because new members and non-members often ask how it came to be celebrated. The commemoration of Doctor Crawford Long's successful use of anesthesia is the date chosen for the observance. The Woman's Auxiliary to the Southern Medical Association originated the celebration as part of its annual program of sponsored activities. From its beginning in the southern states, the custom has spread until it is international.

For any Program Chairman who feels local interest in her auxiliary members in medical history, we recommend two books, both by the same author, Howard W. Haggard, M.D.: *The Lame, the Halt and the Blind*, and *The Doctor in History*. The second volume is superior in content and interest and contains some repetition of the first. Doctor Haggard was a professor of pathology whose avocation was medical history; his choice of subjects and illustrations are excellent. Doctor Robert Lang, Executive Secretary of the Academy of Medicine, has held training sessions in two Oklahoma cities for the county societies. At each session he distributed packets of new material available from the AMA and compiled to help establish speakers' bureaus throughout the country. In addition to suggested helps and outlines for interviews with news media, three volumes have been published in paperback form:

1. Financing Medical Care—An Appraisal of Foreign Programs; Helmut Shoeck, Editor.
2. Federalized Health Care for the Aged: —A Critical Symposium.
3. The Case Against the King-Anderson Bill (H.R. 3920).

The first book is the finest source book possible, extending the argument that we need to know thoroughly the background of other countries, particularly through the eyes of other professions, in order to speak effectively and to debate soundly any com-

ments we receive. Included are appraisals on Britain, France, Germany, Austria, Sweden, Switzerland, and Australia. This volume includes appraisals of journalists, economists, politicians, and actuaries, and is one of the finest we can recommend.

The second, *Federalized Health Care for the Aged?* (and Doctor Lang suggests we use "Aging" when we speak, instead of "Aged") gives us pertinent reasons and arguments to use. Each of us is guilty of speaking and writing in cliches, especially on a topic with which we are closely bound. Studying this book will help freshen our approach and improve our points.

The last book we recommend is the published Statement of the AMA before the House Ways and Means Committee for the 88th Congress. Most auxiliaries and societies have copies of this complete report; however, this book is compact and indexed for quick reference.

It is unfortunate that every society and its auxiliary cannot hear Doctor Lang. He urged that in addressing groups we be well-prepared in advance, that we know the size, the intellectual level and broad interests of the group in advance. "You do not sell an idea because of how it affects you," Doctor Lang said. "Know your audience and approach them in a way that will help them apply the facts to their own situation."

In developing your speech, Doctor Lang commented, we must speak up for what we think is right, explaining early in a speech that a federalized program is not planning for medicine alone, that every federal foothold is reaching into the heart of the economy. One question which is forever applicable is this: Will this help to build a nation in which I want my children or my grandchildren to grow up?

He recommended that it is not only *what we say*—but more importantly, *How* we say it, that achieves favorable results. We feel that each organization in the state, whether it is or is not planning a Speaker's Bureau, obtain the packet for its own programs and reference. □

"Blessed Are The Poor; They'll Elect Me."

So said an editorial writer for the Chicago Tribune, who brandished his pen against the practicalities of President Johnson's "War on Poverty." Observing that poverty cannot be budgeted out of existence, the writer recalled the sand-on-the-beach quotation of Alice In Wonderland:

"If seven maids with seven mops
Swept it for half a year,
Do you suppose," the walrus said,
"That they could get it clear?"

The new multi-million dollar Hisson Memorial Center, Sand Springs, opened its doors to mentally retarded children in early March. Designed to eventually house more than 600 patients, the state-owned institution began operations with only ten per cent of its capacity case load, those children most severely in need of care and training. Physicians will have the opportunity to inspect the facilities at an open house planned for the near future. The center is operated by the Department of Public Welfare and is managed by Joseph C. Denniston, M.D., Medical Director.

Doctor Walter E. Brown, Tulsa, has been named Chairman of the Oklahoma Section of the United States Committee of the World Medical Association for 1964. He is a past-president of the OSMA and is currently serving as an editor of the OSMA Journal.

Assassin's Assassin Jack Ruby is causing a stir with the National Epilepsy League, headquartered in Chicago. It seems that his defense attorney, the noted malpractice lawyer Melvin Belli, is alleging that Ruby is a "psychomotor epileptic," and as such cannot be held responsible for the killing of Kennedy assassin Lee Harvey Oswald. League leaders say the connotation that an epileptic is a potential murderer will do irreparable damage to many innocent victims of the malady; that epilepsy is not to be associated with mental illness.

60,000 physicians call cigarette smoking dangerous. A nationwide survey of physi-

cians conducted by the medical journal *Modern Medicine* revealed that 95 per cent of all physician respondents declared they believe cigarette smoking is a health hazard. Of the 192,000 private practice doctors polled, 60,202 replied. As to their own habits, 52 per cent reported they do not smoke at all. Of the 22.5 per cent who admitted to smoking cigarettes, 89 per cent consider the habit hazardous. Interestingly, chest surgeons and pathologists rank lowest as cigarette smokers, 15.6 per cent and 16 per cent respectively. How do Oklahoma physicians measure up? The report showed that 18.6 per cent smoke a pipe, 25.5 per cent smoke cigarettes, 16.3 per cent smoke cigars, and 51.6 per cent do not smoke at all. Many Oklahoma doctors have "kicked the habit," since 79.9 per cent reported being smokers in the past.

The A.C.H. Hospital of Shawnee, Oklahoma has been selected as one of 76 hospitals in the nation for inclusion in a survey by the American Medical Association's Commission on the Cost of Medical Care. The hospital portion of the AMA's study is designed to sample 60,000 patients discharged during the years 1946, 1954 and 1961.

70 Per Cent of Oklahoma's population were protected by health insurance in 1962, according to a February, 1964 report of the Health Insurance Institute. The national average is 76 per cent.

Doctor Charles E. Martin, Perry, was named his city's outstanding citizen for 1963, at the recent annual dinner of the Perry Chamber of Commerce.

MEETINGS

- March 19-22** PG Course, Gyn. Pathology, Radio-Therapy and Endocrinology, Dept. of OB-GYN, Baylor Univ., Houston
- April 3-4** 16th Annual Midwest Cancer Conference, Hotel Broadview, Wichita, Kansas
- April 6-10** American College of Physicians, Atlantic City, New Jersey
- May 1-3** OSMA Annual Meeting, Skirvin, Oklahoma City

Areawide Planning Council For Hospitals and Related Health Facilities

OSMA
JOURNAL / editorial

SINCE THE first editorial published on this subject in the March issue of the *Journal* of the Oklahoma State Medical Association, the Oklahoma Hospital Association has formally announced the creation of the Oklahoma Health Facilities Information Service. As indicated in last month's discussion, the formation of such a Service was under advisement and the Hospital Association now states that the purpose of the organization is to "identify selected data relative to hospital planning utilization and hospital operation that is essential to improving existing methods of hospital and related institution planning." Along the lines outlined in last month's discussion, the Hospital Association will encourage the formation of a local hospital planning council in any area where a new hospital is contemplated or where any extensive remodeling or revamping of an existing institution is considered. This council would then apply to the State organization, as set up, for information relative to the needs of the given area as to number of beds, etc., and theoretically, the local council would make use of this information or not, as they see fit.

On Sunday, May 15, Mr. James Harvey, President of the Oklahoma Hospital Association, and Kirk T. Mosley, M.D., head of the Oklahoma State Department of Health, met with the Socio-Economic Council of the OSMA and as a result of a lengthy conference, with many questions asked and apparently satisfactorily answered, the Council voted to go on record as being in favor of the operation of the Oklahoma Health Facilities Informational Service as outlined to them.

It thus becomes apparent that the State Health Department has little or no part in the operation of this particular Service, but it is most important to remember that the State Health Department controls the disbursement of funds through the Hill-Burton Plan. The Health Department in effect operates a Hill-Burton Agency for the State of Oklahoma. Doctor Mosley has expressed complete satisfaction with the planned Serv-

ice of the Oklahoma Hospital Association in this new setup, and it is assumed that the Health Department will base future granting of funds to any given area in the State to a great extent on the recommendation of the Oklahoma Health Facilities Informational Service. If this is not the case, then Doctor Mosley has not made the position of the Health Department clear in this proposed system.

In a letter directed to the Executive Secretary of the OSMA dated March 5, Mr. Cleveland Rodgers, the Executive Director of the Oklahoma Hospital Association, says in regard to the new Informational Service, "The staff of the local planning council will assist in writing the entire report with the exception of the recommendations."

The Hospital Association envisages that once the organization is established that finances will be secured to assure the organization's continuance, possible sources of financing cited are Oklahoma Hospital Association, Oklahoma Blue Cross Plan, insurance companies and some Foundations interested in health and hospital work.

Thus it is that Areawide Hospital Planning has come to Oklahoma in a very definite manner, and has been given tacit approval in a sort of Johnny-come-lately manner by the Socio-Economic Council of the Oklahoma State Medical Association. It is hoped that more data will be available for presentation to the House of Delegates at the Annual Meeting in Oklahoma City next month.—*Walter E. Brown, M.D.* □

Tulsa Delegate To BMA

Edward L. Moore, M.D., Tulsa surgeon, has been named an AMA Delegate to the British Medical Association by F. J. L. Blasingame, M.D., AMA Executive Vice-President. He appeared before the BMA House of Delegates, at its April 2-5 meeting in Northampton, England. □



I had no delusions about the magnitude of this job when I assumed the duties of this office one year ago, nor do I feel that the problems have diminished. The original tasks I assigned myself were to awaken the membership to the issues, and to instill a realistic attitude and approach to our problems. I have tried never to lose sight of these basic ideas. How well I have succeeded should begin to become manifest at the annual meeting. I hope to see a good attendance. I hope to see everyone at work—giving their time, thoughts and energies to our problems.

I wish to emphasize once again that we are faced with many problems, and that WE need to provide answers for them rather than to wait until answers are given from other sources which we can neither accept nor tolerate. It appears to me that this concept has been the least understood of my ideas and philosophies. I have been accused of being FOR many of the prevalent ideas. Nothing is farther from the truth. As a matter of fact I have urged the membership to be FOR their own policy, not merely just against another; to have a sane workable policy and answer, not an idealistic, impractical statement which sounds good but is not acceptable, even by our own membership, and least of all by a critical, cynical public!

It still seems to me that we are spending too much time and energy in an attempt to maintain, or regain, a "status quo"—when it is obvious that in an age when movements become virtual deluges there can be no "status quo." We, and all of the freedom loving peoples of America are fighting for our very lives, not just attempting to prevent abrasions, contusions, and lacerations. A rugged oak can be uprooted and destroyed by a flood, whereas, a living, working, animated, purposeful human being might safely land somewhere down the stream!

* * * * *

As a last word, this year's experiences can, and will never be forgotten. They have reaffirmed my faith and convictions that members of my profession are individuals of the highest character, and with the greatest ideals and philosophies of any group; that these ideals and philosophies must be preserved. We are the last intact group free of socialization and regimentation.

To all of the diligent and dedicated workers who labored so faithfully, I shall be undyingly grateful. Without them I could have accomplished nothing. Time alone will disclose the final results of our work.

To the membership, may I say it has been a great privilege, and my greatest honor to have served you. As for myself, I can only say, "I tried."

I'LL SEE YOU AT THE ANNUAL MEETING.

Joe L. Quet, M.D.

THE RADIOCARDIOGRAM

GALEN P. ROBBINS, M.D.
WM. BEST THOMPSON, M.D.
WILLIAM S. MYERS, M.D.

Blood flow through the heart followed by movement of a radioisotope mixed in the blood past a probe placed over the heart gives very useful information about the cardiac output, coronary blood flow and congenital anomalies with cardiac output.

THE PRECORDIAL isotopic indicator dilution curve (radiocardiogram) is a graphic recording of the passage of an isotopically labelled bolus of indicator through the right heart, into the lungs, back into the left heart and a smaller portion back again into the coronary vascular bed before recirculation occurs.¹ Thus there are three theoretical contributions to the radiocardiogram—the area contributed by the right heart passage, the area contributed by the left heart passage and the additional area contributed by isotope passing back into the coronary circulation. The latter is included in the left heart peak in such a manner that its estimation is possible only indirectly.

The time of onset of isotopic appearance in the coronary circulation has been related to the isotopic arrival at some point in peripheral arteries such as the abdomen or cer-

ebrium.^{2,3} Utilizing such a point as a reference permits the drawing of an extrapolation of the left heart curve minus the coronary contribution. More recently it has been suggested that the greater the coronary blood flow, the more protracted will be the downslope of the observed disappearance of washout from the left heart peak. Thus a comparison of this slope with that of a peripheral artery gives an index of the coronary blood flow. Investigations have suggested that the downslope of the primary passage of indicator through the cerebral circulation may be the same as that of a peripheral artery. Thus the "Mena Index" of coronary blood flow is a comparison of the downslopes of the left heart and the head or a peripheral artery.⁴

TECHNIQUE

Our equipment consists of two scintillation probes with 2" x 2" sodium iodide crystals, two Tracerlab ratemeters, attached to the Texas Instrument "Servoriter" with dual pens and 10 inch recording width. Approximately 30 microcuries of I¹³¹ Hippuran or Albumin is introduced suddenly into the median basilic vein and with the precordial probe crystal applied directly to the chest wall over the heart and a second probe with a collimator orifice one inch in diameter and one and one-half inches recess to the crystal is placed at the right temple. The precordial curve is recorded at 1,000,000 cts./min. and the head curve 300,000 cts./min. full width

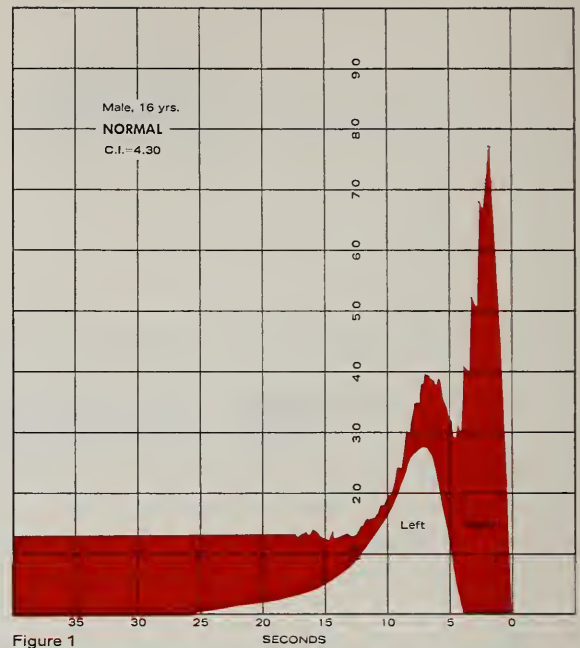


Figure 1

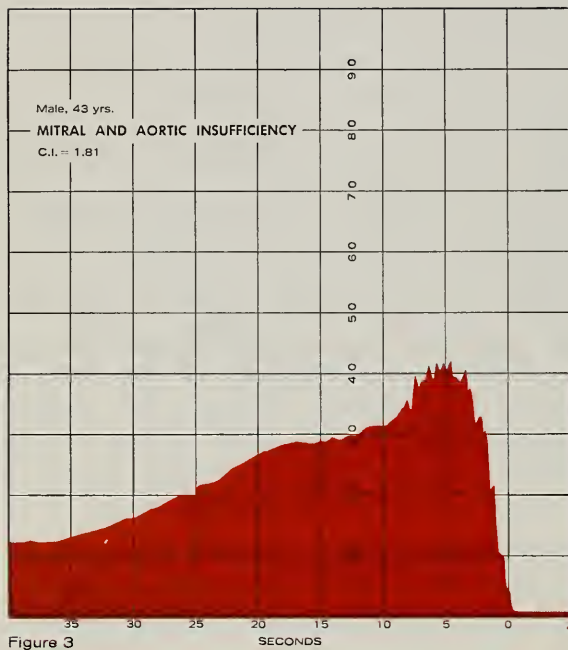


Figure 3

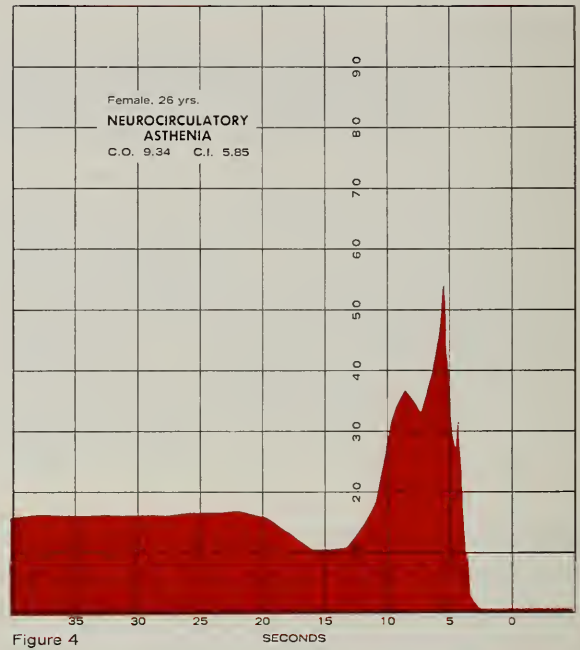


Figure 4

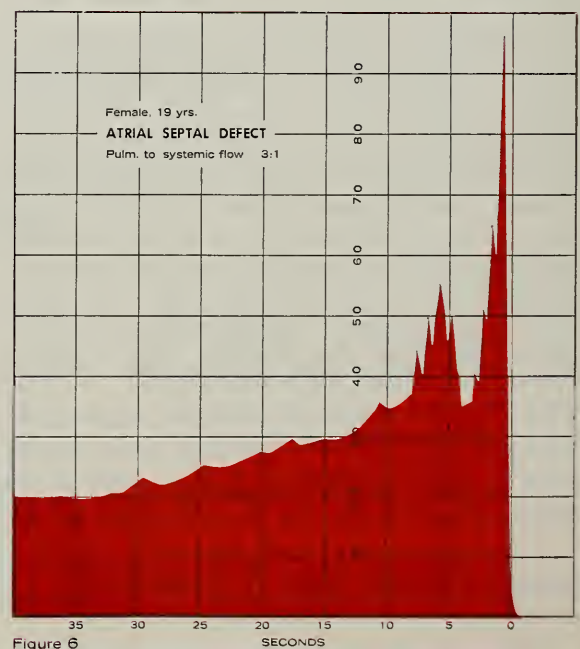


Figure 6

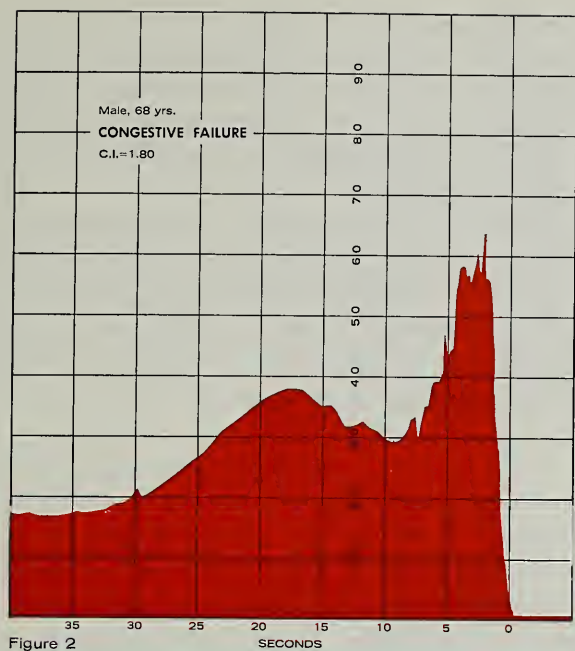


Figure 2

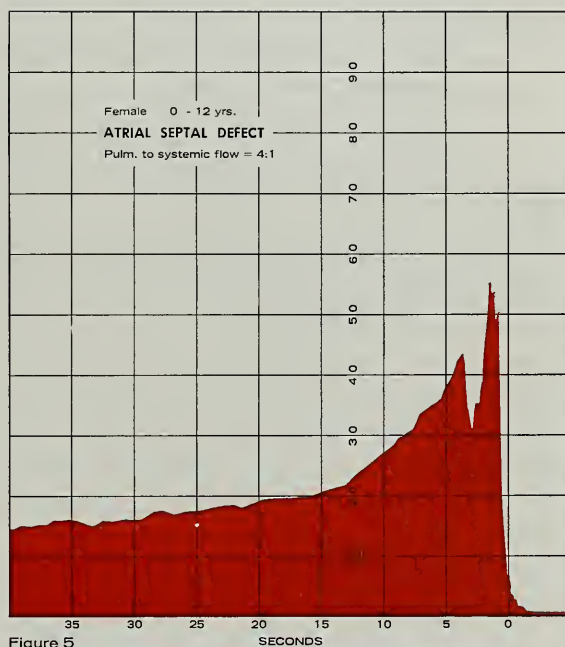


Figure 5

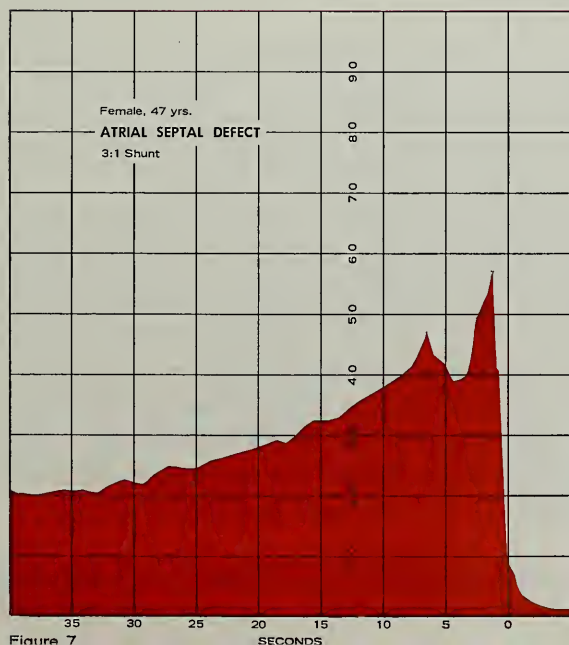


Figure 7

on the recording paper. A time constant of 0.1 second is ordinarily used. The curve is allowed to run for about three minutes or until there has been time for a third recirculation peak in the recording. This level is taken as "equilibrium." At this point the I^{131} is reasonably distributed throughout the blood volume and some is in the kidneys and probably an additional fluid partition as yet undefined. If significant blood volume derangement is suspected I^{131} Albumin is used instead of Hippuran so that blood volume may be measured accurately. Otherwise the blood volume is estimated from standard blood volume charts based on height and weight.

The formula used for calculating cardiac output is as follows:

$$\begin{aligned} \text{C.O. (Liters/Min.)} = & \frac{1.2 \times \text{hgt. of curve (in.) at equilibrium}}{\text{x blood volume (liters)}} \\ & \frac{\text{area (Sq. In.) under the entire curve}}{\text{extrapolated to the baseline}} \\ \text{"Cardiac Index" = C.O./Body surface area (Sq. Meters).} \end{aligned}$$

The latter expression enables one to compare the cardiac output from patient to patient regardless of body size.

Our method of securing an index of the coronary blood flow from these curves has included the techniques of Johnson² and Sevelius.³ We have also utilized the "Mena Index." Our own modifications of both methods have included replotting of the right and left heart peaks on semilog paper. The right heart downslope is extrapolated to the baseline. The left heart peak is replotted from the area above this extrapolated line. The downslope of the entire left heart peak is fitted to a straight line on semilog paper. The downslope is expressed as 2.313/time (min.) to fall from 100 per cent to 10 per cent of maximum count rate. The head curve is similarly replotted on semilog paper and the downslope of the head curve is likewise calculated. When the downslope of the left heart is more gradual than the downslope of the head curve, Mena's coronary index is secured from the ratio of the two downslopes. Even so, there remain both theoretical and technical obstacles to the measurement of coronary blood flow.

At present no effort is being made in

our laboratory to estimate coronary blood flow in the presence of congestive heart failure because the protracted washout phase undoubtedly receives a significant contribution from recirculation of the isotope back to the right heart.

An engineering group is now offering its services for calculation of coronary blood flow from the radiocardiogram according to the latest modification of Sevelius.⁵ This promises to be the most satisfactory of all approaches used thus far.

RESULTS AND DISCUSSION

Estimates of cardiac output utilizing the I^{131} Hippuran and calculating on the basis of predicted blood volume in outpatients after a few minutes of rest in the office yield cardiac indices substantially in agreement with values predicted from other methods. There are obvious theoretical drawbacks to using Hippuran because no true equilibrium can be obtained. However, one is certainly more at ease in using the larger dose of I^{131} required to get the most satisfactory curves knowing that it will be rapidly excreted. The

A graduate of Northwestern University School of Medicine, Galen P. Robbins, M.D., has been certified by the American Board of Internal Medicine. In addition to his private practice he is Clinical Instructor in Medicine at the University of Oklahoma School of Medicine.

Doctor Robbins is an Associate Fellow of the American College of Cardiology and an Associate of the American College of Physicians.

Wm. Best Thompson, M.D., graduated from the University of Oklahoma School of Medicine where he is now Assistant Professor of Medicine. He is certified by the American Board of Internal Medicine.

Doctor Thompson is past president of the Oklahoma Heart Association, a Fellow of the American College of Physicians and a Fellow of the American College of Cardiology.

William S. Myers, M.D., a 1957 graduate of the Bowman Gray School of Medicine, limits his practice to his specialty, cardiology. He is Instructor in Medicine at the University of Oklahoma Medical Center.

Patient	Age	Sex	Control	Treatment	Initial CBF		CBF After 1 Week		Percent of Control CBF
			C.I.	C.I.	ML.	% C.O.	ML.	% C.O.	
JR	30	M	3.99	3.25	123	1.41	172	2.44	173
WEK	36	M	5.80	6.40	163	1.57	377	3.31	211
ODC	40	F	5.13	4.94	132	1.57	105	1.30	83
LG	43	M	4.36	6.94	128	1.30	170	1.48	114
JL	52	M	4.70	5.09	178	1.99	541	5.54	278
EM	62	M	2.68	2.92	26	.49	65	1.14	232
WDR	65	F	4.49	4.47	207	2.83	296	4.07	179
HK	69	F	5.09	4.82	348	4.38	386	5.12	117
JH	73	M	3.43	5.95	132	2.03	443	3.91	194
EG	49	M	4.67	4.60	298	3.10	445	4.72	152

CBF: Coronary Blood Flow. C.I.: Cardiac Index. C.O.: Cardiac Output

Figure 8

Hippuran gives an excellent comparative index in any one patient. Repeat cardiac outputs in the same patient have correlated closely. Such studies as comparing cardiac output before and after digitalization in the decompensated patient have shown the anticipated rise in cardiac output.

Perhaps most striking from the standpoint of the clinician is the characteristic appearance of normal curves as opposed to those seen in anxiety neurosis, right and left heart failure, valvular heart disease and both right to left and left to right intravascular shunts.

Figure 1 shows a characteristic normal curve from a 16-year-old boy. The right heart peak has been separated from the "combined" left heart and coronary peak. Washouts in both components are linear on semilog paper.

Figure 2 shows an early left heart failure in an older patient with enlargement of the left ventricle. The cardiac index is abnormally low; the left heart curve indicates delay of the isotope in either the left heart chambers or lung with a prolonged disappearance slope.

Figure 3 shows more advanced congestive failure with prolonged passage times for both the right heart and left heart. This patient had severe valvular heart disease.

By contrast, figure 4 shows the radiocardiogram of a 26-year-old woman who had classic anxiety neurosis with neurocirculatory asthenia. She was euthyroid. The characteristic features are the rapid transit time and the high cardiac index.

We have been most interested in the recognition of left to right shunts by means of the radiocardiogram. Three patients' curves are shown in figures 5, 6 and 7, all of whom

had pulmonary to systemic flow ratios of 3:1 or greater. Another patient not shown who has a coronary arteriovenous fistula proven by angiography and a left to right shunt based on catheterization data (1.10:1 pulmonary/systemic flow ratio) also has shown similar findings of a left to right shunt. The larger shunts show a very characteristic appearance with a shortened circulation time between the right and left heart peaks and a gradual washout in the phase of recirculation. In the less characteristic coronary arteriovenous fistula, there was a tiny peak visible just prior to the usual recirculation and then there appeared to be a continuing washout beyond this point.

At present, we are utilizing the coronary blood flow measurements to secure a baseline for long term follow-up studies. We have found it useful in estimating the efficacy of coronary dilator therapy. It is reassuring if a normal value is obtained in the "problem case" with non-specific T-wave changes in the electrocardiogram. Figure 8 shows typical data from a study of a timed-release preparation of pentraerythritol tetranitrate (Tetrasule 80®). Our original data was obtained by the techniques of Johnson and Sevelius. In recent months Sevelius has adopted a technique which is much more reproducible utilizing an entirely new mathematical concept to quantitate coronary blood flow as well as the coronary blood volume monitored.⁵ The "Mena Index" is simpler but the downslope of the head curves does not appear to be invariably more rapid than that of the left heart from our own observations.

The usefulness of the cardiac index preoperatively may be illustrated by the case of K.L.R., a 44-year-old male who had had a

myocardial infarction three years previously. Because of a normal heart size and absence of dyspnea, edema and orthopnea, the cardiac index of 2.96 l/min/m² was ignored (normal in our lab 3.5 to 4.5 l/min/m²). The patient underwent surgical operation for a Leriche Syndrome without digitalization and on the fourth post operative day classical findings of congestive failure ensued. Digitalization restored a normal cardiac index. Low cardiac indices and also curves with delayed passage times have subsequently been interpreted as an indication for prophylactic digitalization.

SUMMARY

Our experiences with the radiocardiogram in over 300 outpatients seen in a cardio-

vascular clinic have shown it to be clinically useful in demonstrating abnormalities of cardiac output, impending and overt heart failure and cardiac anomalies with left to right shunts. Indices of coronary blood flow derived from the radiocardiogram are valuable as a relatively simple means of evaluating the efficacy of coronary dilator therapy and may aid with diagnosis in "problem cases" of coronary artery disease. □

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1111 North Lee, Oklahoma City, Oklahoma

MEDICAL ASSISTANTS PLAN MAY MEETING

Lake Murray Lodge in Ardmore will be the scene of the 16th Annual Meeting of the Oklahoma State Medical Assistants Society, May 2nd and 3rd, 1964. Registration opens officially at 11 a.m. on Saturday, May 2nd, with the medical assistants of Ardmore physicians acting as general convention hostesses. Roger Reid, M.D., advisor to the state society as well as to the Ardmore group, will give the welcoming address to the first general session Saturday at 1 p.m., followed by the official response by Mrs. Gene O'Brien, Oklahoma City, state president-elect. Current president, Mrs. Avis Ragan (formerly of Enid, now of Oklahoma City) will preside over delegates from the seven county organizations, who will dispose of official business, elect new officers, and submit the names of four state physicians to serve on the state advisory board.

A Problem Clinic and Workshop is scheduled for 4 p.m. Saturday afternoon, with Don Mannerberg, M.D., Ardmore physician moderating. Mrs. Bonnie Glover, state treasurer and executive secretary, will coordinate discussions by medical assistant panel participants, representing various types of medical-practice groups over the state. Those participating on the panel are: Mrs. Jo Alexander of Marietta (single-doctor office); Mrs. Lorraine Cox of Blackwell (two-doctor of-

fice); Mrs. Bobbie Antrim of Oklahoma City (clinic practice); and Mrs. Hazel Wade, R.N. of Tulsa (hospital practice).

Representatives of the Medical Service Society of Oklahoma will host a social hour immediately preceding the Saturday night buffet dinner at 7 p.m. where Mrs. Junia Shirley, general convention chairman, will welcome the group and introduce guest speaker, Ralph W. Murphy, M.D., Ardmore physician.

Following Sunday buffet breakfast at 8 a.m., the House of Delegates will reconvene for business windup. Donald E. Kizer, Ph.D., of the Samuel Roberts Noble Foundation (Ardmore) will act as luncheon guest speaker. New officers will be installed at the final session prior to adjournment at 3 p.m.

Registration fee, including Saturday evening buffet, Sunday breakfast and luncheon, is \$10 for members of the Oklahoma State Medical Assistants Society, and fee for non-members is \$12.50. All registrants for the meeting will be housed in the Deluxe Villas, which are priced at \$13.50 (one to four persons) and \$19 (one to six persons). Reservations for housing should be made direct to Lake Murray Lodge, Ardmore, Oklahoma. Advance registration for the convention may be sent to Mrs. Bonnie Glover, Treasurer, Route #1, Inola, Oklahoma. □

The Family as the Unit of Health Care

Observations in a Rural State

ROBERT C. LOWE, M.D.
PEARL D. FISHER, Ph.D.

Assuming that "the family" has meaning in health care, the more consistent its expression in the use of diverse medical care resources, the more frequent the use of those resources is likely to be.

A MAJOR PART of the continuing discussion and philosophical speculation on the long term viability of general medical practice and its relationship to specialization deals with the role of the physician as the "family doctor." It has been stated¹ that the weakening of intrafamilial ties, along with the growth of physician specialization, has minimized the role of the family as a unit in the use of physicians and in the practice of medicine. On the other hand, more detailed consideration of the family in relation to health² suggests that, while the family structure has changed in response to alterations in the socio-economic characteristics of the culture, the result is essentially the addition of a different type of family, leading to a greater range in family form. Associated with a decrease in the number and family size of the "extended family," i.e. several generations living near together and bound by close ties, the so-called "nuclear

family," consisting of parents and a limited number of minor children, associated with a greater degree of geographic dispersion and independence of its secondary related sub-families, has increased to become the dominant pattern. Nevertheless, the basic intrafamilial relationships and functions persist and are judged to be actually increased, in regard to the development and maintenance of health, because of the greater relative isolation of the nuclear family in the meaningful circumstances of its living.

Ultimately, the continuing existence and maturation of the "family doctor" phenomenon depends upon the way in which physicians are used, as well as upon its further professional definition and developmental efforts.^{3,4} It should become clear that the term "general physician" or any of its synonyms or modifications are not necessarily identical with the implied meaning of the term "family doctor." The latter depends upon a particular pattern of physician use coupled with an appropriate pattern of physician response. The absence of either factor prohibits the actual or potential functions of the physician-family combination. The degree to which both function and are mutually compatible, within professionally determined limits, will define the scope of family health care by the "family physician." One would expect a degree of variation extending from one extreme, in which the form alone is present, through a range in which the initiative to action is shared by the family with the physician within the limits im-

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posed by family attitudes and choices in the disposition of available income. Maternal and child health functions of the practicing physician are examples of this phenomenon.

It is possible that changes in family form, or other concomitant changes, might be shown to have contributed to significant change in physician use, especially in densely populated urban and metropolitan areas, in proportion to the elaboration of specialty practice and the multiplication of alternate physician choices. Nevertheless, the probability of such change, to an extent sufficient to render the above concept of the "family physician" inoperative, should not be taken for granted. For such a change to occur as a logical and stable development, a relatively high level of objective comprehension of health, ill-health and of the complex social organization that has developed for its care must be postulated for the public other than the health professions. It is more probable that beyond a certain point nothing more than a varying degree of subjective sophistication can be anticipated.

Pertinent observations on the actions of families in search of medical care which, in sum, would present at least a partial description of the mode and variations of a pattern are difficult to obtain. This is particularly true for populations whose actions are unaffected by organized sources and methods of payment for care which in themselves affect the pattern of those actions. For these reasons, an analysis is presented here of data from household interviews in a recent survey which meet certain criteria for a family making primary contact with medical resources for individual care during the recall period. The area within which the survey took place, its context and the population were such that a relatively high degree of homogeneity was expected in regard to a number of factors, some of which might be relevant to the subject of this type of study. The observations which provided the data were made* in a setting in Oklahoma (1962) defined by the Bureau of Census criteria as wholly rural (semi-isolated) with a population density of 8.3 per square mile accord-

ing to the 1960 census. The population of the area had available, with generally easy accessibility, the medical and general hospital resources of six communities. One of the smaller resource communities, with three physicians, was centrally located in the area and the rest were contiguous to the periphery of the area. The number of physicians per community, by telephone directory count, varied from two to 55 totaling 73. Forty-two per cent characterized their practice⁵ as general and approximately ten per cent and 50 per cent, respectively, as part-time and full-time specialty practice. Over 80 per cent of the general physicians were under 60 years of age. All families in the area lived within 25 miles of at least one of the community resources and the majority had a choice of two or more, with at least five general physicians, within that distance.

A "family" was defined, for this study, as the presence of the two spouses living together with or without the presence of one or more dependent children and with or without other related individuals. The female spouse was the respondent in all families included in the final group.

It is not possible to assume a consistent understanding and use of the term "family doctor" or apparently related terms. Therefore, the definition used here is based on the consistent primary use of the same physician by one or more members of a family on more than one occasion during the recall period of six months preceding the interview. The few instances in which one parent used a physician other than the one used consistently by other family members are not included in this category. When multiple use of physicians was by dependent children only, the family was excluded unless at least one parent was found to have used an identified physician within the six months immediately preceding the recall period.

This method of defining the "family" and the "family doctor" isolated 62 families in two categories, namely, a "family doctor" category of families and a "mixed doctor" category of families. Forty-two (70 per cent) of the families fell in the first category, showing a consistent multiple primary use of the same physician. Twenty (30 per cent) families fell in the second category, showing multiple primary use of different

*The survey was done by members and graduate students of the Department of Sociology of the University of Oklahoma in the summer of 1962, supported in part of a Public Health Service grant.

"Family Doctor" Families:

Respondent Age Group (years)	No. Family	Spouses and others			Dependent Children Less than 14 Yrs.			Dependent Children 15/24 Yrs.		
		Ind.	Cond.	PPC	Ind.	Cond.	PPC	Ind.	Cond.	PPC
15-34	17	34	29	23 (7 ob)	33	36	28	2	0	0
35-44	10	20	16	14 (1 ob)	21	13	12	8	7	7
45-54	4	8	6	6	5	1	1	7	6	5
55+	11	27	32	27	—	—	—	—	—	—

"Mixed Doctor" Families:

15-34	9	18	10	8 (2 ob)	22	13	9	3	2	2
35-44	1	2	2	1	3	2	2	2	1	1
45-54	3	6	3	3	5	4	3	3	2	2
55+	7	15	21	19	—	—	—	—	—	—

TABLE I

Reported Illness Condition and Primary Physician Contacts (PPC) by Family Categories, Respondent Age Group and Family-Member Group for Families from a Rural Area of Oklahoma—1962

physicians. Primary agency referrals and the use of different physicians while away from home, for reasons other than seeking medical care, were excluded in the differentiation of the family categories and in subsequent considerations.

Table I presents the relevant data, *i.e.* the number of families, individuals, reported illness conditions and primary physician contacts (PPC) in the two categories of families. The form of tabulation combines the data for each individual with that of other individuals in the same family-membership position in each family, grouped according to the age of the respondent. The latter is taken to be a closer estimate of family age. The data for the male spouse is grouped with that of the respondent. Such a tabulation presents illness and physician use as a family phenomenon as well as one affecting the various family-member groups.

Underlying the evaluation of these findings and their analysis is the general problem of obtaining complete information on family sickness by means of such survey methods. These problems have been extensively studied by others in regard to obtaining dependable rates for specific diseases.^{6, 7} This was not the primary objective of the survey from which the present family data was abstracted. Its objective was the study of overt actions in relation to illness. It is assumed that the technical aspects of interviewing and of the interviewing mechanics were handled so as to minimize their contribution to distortion. Under these circumstances, the respondent's reporting of sickness data can be assessed as an act relevant to other overt health care actions within the

family and between the family and outside resources. The particular additional overt action, in this study, is the primary physician contact.

Table II presents the reported rates (number per 100 individuals) for non-obstetric illness conditions and for non-obstetric primary physician contacts (PPC) in families grouped by respondent age periods and in family-member groups. The gross rates for all families with dependent children and for those without are calculated directly from their respective combined data in Table I. When separated into the two family categories, the rates for the "family doctor" and "mixed doctor" families with dependent children are adjusted to the age distribution of the member groups of all of the families

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with dependent children in order to make them more directly comparable. Those for the female and male spouse groups are adjusted to the respondents' age groups for all families.

The most obvious result is the apparent difference in the over-all level of the rates in the two family categories with dependent children. The rate of reported illness conditions in the "family doctor" families (76.4) is eight per cent greater than that for the combined families and that for the "mixed doctor" families is 13 per cent less. These differences are not statistically significant. On the other hand, the primary physician contact rate of the "family doctor" families differs by less than ten per cent from that of the combined families (57.9) whereas the

difference for the "mixed doctor" category is twice as great. The latter can be considered to be a significant difference. In contrast to these findings are the very similar rates of the families of respondents 55 years of age and over in which there were no dependent children in the homes.

There are no consistent differences for the family-member groups of the "family doctor" families from the combined rates of the respective family-member groups. However, the rates reported for illness conditions in the family-member groups of the "mixed doctor" families are consistently low and show somewhat less variation than in the former family category. The significant difference for the total PPC in this category appears to result largely from distributed differences which become significant in combination.

	Spouses and others	Re- spondent	Male Spouses	Dependent Children		
				<14 yrs.	15/24 yrs.	Total
Gross Rates:						
Respondent						
Age (yrs.)						
15-54 yrs.		15-55+				
Illness-						
Conditions	63.6	100.0	85.5	77.5	72.0	70.8
PPC	51.1	67.7	64.5	61.8	64.0	57.9
55+ yrs.						
Illness-						
Conditions	109.5	—	—	—	—	128.6
PPC	128.6	—	—	—	—	109.5
Age Adjusted Rates:						
15-54 yrs.						
Illness-						
Conditions						
*"F.D."	67.5	80.2	48.5	86.4	69.3	76.4 z = +1.17 p = .242
**"M.D."	55.2	109.0	20.1	60.5	60.0	61.3 z = -1.53 p = .126
PPC						
*"F.D."	56.0	68.0	36.0	71.7	63.6	63.7 z = +1.29 p = .098
"M.D."	36.9	67.4	20.1	50.0	46.7	44.3 z = -2.07 p = .019
55+ yrs.						
Illness-						
Conditions						
"F.D."	110.8	125.3	149.1	—	—	110.8
"M.D."	126.2	133.4	56.1	—	—	126.2
PPC						
"F.D."	100.0	95.1	138.3	—	—	100.0
"M.D."	111.8	111.0	56.1	—	—	111.8
*"Family Doctor" Families						
**"Mixed Doctor" Families						

TABLE II

Reported Rates (per 100 Individuals) of Non-obstetric Illness-Conditions and of Primary Physician Contacts for Families and Family-Member Groups

In the families of respondents in the older age group, programs of financial assistance probably influence the levels of the rates of physician use to some extent but there was no evidence to suggest any differential effect between the two categories. It may be pertinent that in the "family doctor" families with dependent children the adjusted rates of reported illness conditions and of primary physician contacts of the male spouse were found to be 60 per cent of the respondent rates. In the "mixed doctor" category they were approximately 20 per cent. In the older families without dependent children in the homes these percentages doubled (120 per cent and 145 per cent) in the former category and (40 per cent and 50 per cent) in the latter. The age distribution of the male spouses in all respondent age groups in both categories was very similar for each category and contributed little if anything to the observed rate differences. The change of the male spouse rates, in relation to the change in those for the female spouse-respondent, in the "family doctor" families is of such degree as to equalize or reverse their relative magnitudes observed in the younger families with dependent children. A similar degree of change was not found for the male spouses of the "mixed doctor" families.

DISCUSSION

These sixty-two families represent 40 per cent of all similar "families" from the survey, each making at least one primary physician contact in the six month period. The "family doctor" category represented 30 per cent of families with respondents 15-54 years of age and dependent children; and 20 per cent of those of respondents 55 years of age and over without dependent children in the home. These figures cannot be taken to represent the general level of consistent use of the same physician in primary contacts in this setting because the working definition was based on multiple use during the six month period. In this connection, it was found that almost two-thirds of the primary physician-patient combinations in the "family doctor" category and less than one-third in the "mixed doctor" families and in those making one contact, with dependent chil-

dren, were referred to by the respondent as family doctor contacts. In the older age groups of families, in all three instances, approximately one-third of such combinations were referred to in this manner in each.

The form should not be mistaken for the substance, nor should the differences in form be accepted as conclusive evidence that a similarity of function in the use of physicians is absent. The quantitative analysis of illness and primary physician contact rates in these families reveals two different levels of use when the families are divided into two categories on the basis of the manner in which physicians are used by or for family members in making initial illness-physician contacts. The over-all difference in the PPC rates is of such degree as to practically preclude its being a chance event generated solely by the methods used in family selection and separation.

It was assumed initially that, everything else being similar, there would be no reason to anticipate a real difference in the frequency of reported illness in different families solely because of the manner in which physician resources were used in primary contacts. Comparison of age-adjusted reported illness condition rates for each of the two family categories with the total for both groups, showed that neither differed significantly from the average. On the other hand, it was initially anticipated that there would be a lower primary physician contact rate in the "mixed doctor" family category because of the additional expected factor, in this setting, of a higher proportion of more distant physician use by such families. A significantly lower rate was, in fact, found.

There remains the question as to what factors, other than the mode of physician use itself, might separately or jointly contribute to the differences noted. There are several relevant items that could do so, more or less substantially. Among these are (1) differences in the differential or selective perception and recall of illness and reporting by respondents, which is likely to be less pronounced when illness is associated with physician use; (2) actual differences in the frequency of non-obstetric illness conditions with an associated lesser frequency of primary physician contacts; (3) personal and/

or other available financial resources which, in the case of the former at least, must be considered in likely association with compensating decisions within the family in regard to family-member use of physicians, and the level of living with its implicit relationship to educational accomplishments and the general level of health information; and (4) "convenience," when defined as "nearby," in relation to the location of the physician or physicians of choice.

It is generally recognized⁷ that family illness reporting varies with the family status of the respondent and among respondents of similar family relationship(s). The consistent use of the female spouse, as the respondent, who in the younger families still functions also in the actual maternal role, would be expected to increase the homogeneity of the data obtained on all families. It was noted, in preliminary studies of all interviews in the survey, that the reporting pattern of all current illness on themselves and other family members by respondents who reported certain illness conditions in themselves* had significantly higher reporting rate for themselves and lower for the family as a whole than did respondents not reporting such conditions in themselves. In the two family categories in the present study the former type of respondent was about equally represented in each, the proportions being 41 per cent in the "family doctor" category and 53 per cent in the "mixed doctor" families. The observed difference of the rates of reported illness conditions in the two categories of families with dependent children was found to be associated with a persistence, in the "mixed doctor" category, of the reporting pattern of what had been designated in the prior study as the "index respondent." It did not appear to persist in the respondents reporting in the "family doctor" category. Neither was it evident in the reporting of the primary physician contacts in either family category, suggesting that the association of physician use with the occurrence of illness introduces a factor contributing to more equivalent reporting in all families.

*The types of conditions reported were allergies (particularly upper respiratory), frequent headaches (including migrainous type), obesity, certain long term gastrointestinal conditions and nervousness.

Other factors for which data was available, and which might bear on the results, included family cash income and respondent levels of formal educational accomplishment. The distribution of families with dependent children, in respect to the medians of income and education, was not different for the two categories of families. The age-adjusted primary physician contact rates for all conditions in each family category showed no difference, in that the proportions above and below the medians were not different in either category. The same result was found in regard to the educational levels of the respondents, although satisfactory age adjustments were limited by the small number of families in the "mixed doctor" group and the concentration at the level of highschool completion.

An interesting and possibly pertinent reversal of rate was observed between adults' and children's PPC rates in the whole group of families with dependent children when the data for adults and children were studied separately. With respondent educational levels of less than 12 years, the gross adult PPC rate was 83.3 and that of the dependent children was 54.2. Above this educational level (12 years or more) the adult PPC rate was 43 per cent lower (48.1) and that for the dependent children was 40 per cent greater (75.4). The small number of families in the "mixed doctor" group could not provide dependable results on the association between the combination of educational and cash income levels and the PPC rates for adults and children separately. However, if it is assumed that the average family in this type of setting functions, in regard to individual illness care actions, within limits imposed by attitudes towards other needs and wants and other factors bearing on spending decisions, including anticipated income, the above findings suggest the likely influence of educational levels within these limits. Whether a difference in this regard existed in these families between the "family doctor" mode of primary contact and total physician use and the "mixed doctor" type cannot be stated. The results, obtained when the data was studied on this basis, did suggest that the increase of the rate for dependent children in the latter category derived from a smaller reduction

of the PPC rate for the adults and a greater increase in the rate for dependent children in association with the income levels above the median for the whole group.

Finally, the matter of "convenience" appeared to be significantly associated with the higher primary contact rates of the "family doctor" category of families with dependent children. Sixteen per cent of primary physician contacts by these families were found to have taken place beyond the nearest resource community or communities. On the other hand, one-third of such contacts for the dependent children and two-thirds of those for adults of the "mixed doctor" families took place beyond the nearest resource communities. There were no differences noted between the two categories of families in the older age group, approximately fifty per cent traveling beyond the nearest resources for their primary physician contacts.

SUMMARY

Data from a group of 62 families from a survey done in a rural setting was studied. The families, selected on the basis of multiple primary physician contacts, were found to differ significantly in their rates of such contacts when separated and grouped according to whether the pattern of physician usage was consistent initial contact with the same physician or the use of more than one. All of the dependent children were included in forty-seven of these families and the difference in the over-all rate of primary

physician contacts appeared to affect all family-member groups similarly. The relevant actions were subject to little distortion by methods and sources of physician reimbursement which would tend to alter the pattern of use as well as the frequency. The data gave no reason to consider the differences between the two categories of families as being associated with differences in family cash income or with the educational level of the female-spouse respondent. "Convenience," in the sense of "near-by" physician location with reference to the family residence, was significantly associated with the differences.

The study was done to illustrate the actual or potential importance of the manner in which families use physicians to the concept of the "family doctor" and of "family medical care." A coherent consistent use of a given physician is considered to be as essential a part of the mutual physician-family relationship as is the physician's updated interest and capability to function in such a capacity. □

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TULSA GROUP OPENS NEW CLINIC BUILDING

All members of the Oklahoma State Medical Association were invited to the formal opening of the new clinic building of the Glass-Nelson Clinic in Tulsa, Sunday, March 22, 1964 from 4:00 to 6:00 p.m.

Complete remodeling of the first floor, which formerly housed the group; the addition of a second floor; and, a wing on the front comprise the 14,000 square feet of floor space of the new modern structure. An entrance and reception room, a pharmacy and elevators are accommodated in the front wing. The second floor has been arranged for the department of internal medicine and the clinical laboratory.

Enlargement of the clinic has been instrumental in the establishment of a new department in pediatrics. □

The Sphincter of Oddi Syndrome

VIRGIL RAY FORESTER, M.D.

Partial obstruction of the sphincter of Oddi, either intermittent or continuous, associated with stimulation of the gland will produce all forms of pancreatitis. A more descriptive terminology for chronic recurring pancreatitis is suggested.

THE SPHINCTER of Oddi syndrome is a condition in which the sphincter is markedly contracted, producing a chronic, recurring pancreatitis and gallbladder disease.

Symptoms associated with this condition are recurrent in character. In periods of remission, the patient has no symptoms. During exacerbations the patient experiences pain in the epigastrium which frequently radiates to the left upper quadrant of the abdomen. At times pain is referred to the right upper quadrant and around to the right subscapular area. Frequently a through-and-through pain is noted. At times the pain is beneath the left breast or radiates into the left shoulder. Nausea is usually present sometimes becoming severe resulting in vomiting. Ingestion of food or drink precipitates the discomfort so the patient is prone not to eat because he feels more comfortable with an empty stomach.

Incomplete or intermittent obstruction of the canine pancreatic duct with stimulation

to the flow of pancreatic juice produces all forms of pancreatitis, depending on the degree of stimulation. The pathological changes range from simple edematous pancreatitis to vascular congestion, hemorrhage, areas of focal necrosis and death.¹

This paper reports 21 cases diagnosed pre-operatively as sphincter of Oddi syndrome in which the sphincter of Oddi was found to be constricted. We feel that there is sufficient evidence from these observations to conclude that such an obstruction to the flow of pancreatic juice produces chronic, recurring pancreatitis.

The exact diameter of the sphincter of Oddi in the living patient has not been discussed in the literature reviewed by the author. The method of evaluation in this series was made by determining the size probe (Bakes' Dilators) which would pass without resistance through the sphincter at surgery. There were five cases in which a two mm. probe would not pass, ten cases which resisted a three mm. probe, five cases in which a four mm. probe would not pass and one case in which the size of the sphincter was not recorded.

It seems reasonable to conclude that the sphincter opening is less in the ambulatory state, since a certain degree of relaxation is to be expected during total anesthesia.

The factors which may produce a constriction in the sphincter of Oddi is still a question. Hypertrophy of the muscular elements of the sphincter seems plausible.² Fibrotic changes as described by Cattell is

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also a possibility.³ Doubilet is of the opinion that patients with pancreatitis do have recurrent periods of hypertonicity of the sphincter due to emotional stress and it is during these periods that reflux may occur.⁴

An attempt to obtain an operative pancreatogram was made on all but four of the patients. This was done primarily in an attempt to confirm the preoperative diagnosis. In the presence of acute inflammation of the pancreas, the acinar tissue can be opacified by changes in permeability of the duct epithelium, allowing the opaque medium to permeate the affected part of the gland. At times the whole pancreas may be opacified, at other times only regions in the head, body or tail are visualized. Where only edema of the pancreas exists, the secretory pressure is diminished so that the radio-opaque medium is pushed into the finer pancreatic ducts, but does not opacify the acinar tissue.⁵ In this series the duct was cannulated successfully in 15 cases. In two cases cannulation was unsuccessful. There were four cases in which no attempt was made to cannulate the pancreatic duct. Of the 15 successful cases four showed evidence of inflammation, six showed evidence of edema, one revealed a cyst in the tail of the pancreas and four had negative findings. In the four cases in which no attempt was made to do a pancreatogram one patient had cholecystitis with cholelithiasis and an associated pancreatitis as shown by a radioactive fat study. Another patient had a preoperative serum amylase of 996 units. A third patient had a preoperative serum amylase of 210 units and the fourth showed reflux of dye into the pancreatic duct on the operative cholangiogram. In the two cases in which attempts to cannulate the gland for a pancreatogram were unsuccessful, one patient's pancreas was described by the surgeon as reduced in size and having a soft, fibrous feel. The pancreas of the second patient was described as no larger than the index finger and having a soft, mushy consistency.

Virgil Ray Forester, M.D., graduated from the University of Oklahoma School of Medicine in 1944, where he is now Assistant Professor of Medicine. His practice is limited to his specialty of internal medicine and gastroenterology.

Of the four negative pancreatograms one patient had a two hour glucose tolerance test of 228 milligrams percent, a low serial serum amylase and a reduced radioactive fat study. Another showed an elevated second hour glucose tolerance test with an otherwise negative evaluation for pancreatic disease. This patient was operated primarily on the basis of her symptoms. A third patient showed an elevated second hour glucose tolerance test, a reduced serial serum amylase and a low trypsin activity test. A fourth patient had a reduced radioactive fat study preoperatively.

The gallbladder has been found to be diseased in each of the cases in this series. Though this frequency of involvement makes it a part of the syndrome, it is not considered a major factor in the overall condition. Cattell and others have stated that gallbladder disease is the result of partial or intermittent constriction of the sphincter of Oddi which in turn inhibits the free flow of bile.^{6, 7} There is convincing evidence in the literature to indicate that involvement of the gallbladder is due to a regurgitation of the pancreatic juices into the common bile duct as a result of constriction of the sphincter. This produces inflammation of the gallbladder which results in chronic cholecystitis or cholelithiasis. Ten patients in this series previously had undergone a cholecystectomy for gallbladder disease. In 11 cases the gallbladder was present and the pathological report on eight of these cases showed chronic cholecystitis with cholelithiasis.

DISCUSSION

The sphincter of Oddi syndrome is not uncommon. There are two possible reasons why the disease is not diagnosed more frequently: (1) It is not considered because the symptoms resemble those of gastroduodenal ulceration, gallbladder disease or gastroenteritis. (2) The diagnostic procedures are difficult. Unfortunately, there is no specific test which can be utilized quickly and easily. A battery of tests must be used and a careful analysis of results must be made before the patient is operated.

So far medical therapy has not given relief to individuals suffering sphincter of Oddi syndrome. However, repair of the

Oddi Syndrome / FORESTER

sphincter of Oddi by sphincteroplasty has produced good results. In the cases reported, the clinical results have been quite favorable. Those cases which were operated approximately one year ago are still free of symptoms. All cases have experienced immediate postoperative relief of their symptoms.

It is recognized, however, that there is a certain mortality associated with sphinctero-

plasty. Therefore, we believe that only selected cases should be operated. ☐

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Abdominal Aortic Aneurysm As A Cause of Severe Gastrointestinal Bleeding

H. LELAND STEFFEN, M.D.

*Review of literature and case report
of unusual manifestation of abdominal
aortic aneurysm.*

THE RUPTURE of an arteriosclerotic abdominal aortic aneurysm into the gastrointestinal tract with resultant hematemesis and melena is unusual, but in all probability not as unusual as reported cases would lead us to believe. Salmon, in 1843, was the first to record the rupture of an abdominal aortic aneurysm into the bowel.¹ Since rapid exsanguination from this catastrophe is unusual, surgical salvage is possible if this diagnosis is seriously considered along with: esophageal varices, peptic ulcers, benign and malignant lesions of the small and large intestine, mesenteric thrombosis, and diverticulitis as causes of gastrointestinal hemorrhage, especially in older patients.

In 1961 the reported cases of this entity in the English literature were reviewed by Baumler, and only 52 cases were found.² Each of these ended fatally. In 1958 Voyles and Moretz reported what they considered to be the first published case where an aneurysm ruptured into the gastrointestinal tract, was diagnosed as such and surgically

treated.³ However, their case proved to be a mycotic aneurysm (*Salmonella cholerae*, variant suis), and not an arteriosclerotic one. The patient died of postoperative complications. This case history and brief review of the literature is published especially to call attention of the clinician to the necessity of antemortem diagnosis and the necessity of prompt action. Surgical salvage has now become a reality with the availability of synthetic aortic grafts, large quantities of whole blood, antibiotics and improved anesthesia.

HISTORY

This 76-year-old white man was admitted to St. Anthony Hospital, Oklahoma City, on May 20, 1960, because of low back and mid-abdominal pain of four to six weeks' duration with marked fatigue and lethargy of ten to 14 days' duration. He stated that all of these symptoms had progressively increased in severity. One week prior to admission he took a single dose of combined castor oil, epsom salts and lemon juice. He subsequently vomited for two days and two nights. The pain was constant and not related to body position, time of day, respiration, eating, defecation or micturition. Anorexia had been prominent for seven to ten days and he stated that he had lost approximately ten pounds of weight. He denied hematemesis but had passed several black stools.

PHYSICAL EXAMINATION

The patient's oral temperature was 98.6 degrees F., his pulse rate 88 per minute, his blood pressure 140/70 mm Hg. and his respiratory rate 18 per minute. He was moderately obese and showed no real evidence of recent weight loss. The only significant abnormal physical findings were in the abdomen. The liver edge could be felt three cm. below the right costal margin and was not tender. While the patient complained of deep tenderness in the region of the umbilicus, a definite mass could not be outlined. There was no rebound or costovertebral tenderness and peristalsis was normal. There were no significant joint changes of the extremities as is ordinarily seen in the arthritic patient. Digital rectal examination was negative except for a large, firm prostate and very dark fecal material which was positive for blood. After cleansing enemas, sigmoidoscopy was negative.

LABORATORY AND X-RAY DATA

The hemoglobin level was 11.2 gm. per cent; the hematocrit 34 per cent; the white blood count 11,100 per cubic millimeter, with a normal differential. The urinalysis revealed one plus albumin and three to five granular casts per low power field, but was otherwise normal. The total serum protein was 6.4 gm. per cent (normal 6-8 gm. per cent), cephalin flocculation three plus, direct bilirubin 1.5 mg. per cent, indirect bilirubin 0.55 mg. per cent, blood urea nitrogen 25 mg. per cent, amylase 74 Somogyi (normal 60-160), S.G.O.T. 37 units (normal 8-40), acid phosphatase 0.42 BL units (normal 0.13 to 0.63 BL units), alkaline phosphatase 16.5 Bodanski units (normal 2-4 units), Ca 4.5 meq. (normal 4.5 to 5.5), and phosphorus 4.0 mg. per cent (normal 2 to 4 mg. per cent). Bromsulphalein retention was 39 per cent (normal 0 to 4). An electrocardiogram revealed changes compatible with myocardial ischemia in both the anterior and posterior area. A chest film, skull films and barium enema were negative. An upper gastrointestinal series showed only a small esophageal hiatus hernia and spasm

of the antrum from unknown cause; an excretory urogram showed poor function bilaterally, and a gallbladder series with Telepaque showed non-visualization with a single dose and faint visualization with a double dose. Findings with intravenous cholangiography were essentially the same. Lumbar spine films showed moderately severe degenerative changes of the vertebral bodies and accessory processes with no evidence of bony erosion.

HOSPITAL COURSE

Four days after admission the patient developed a temperature of 102 degrees, chills and urine findings compatible with an acute pyelonephritis. His urine output became decreased and his blood urea nitrogen increased to 55 mg. per cent. Urine culture revealed *E. Coli* with sensitivity to Kantrex and Mandelamine. The patient was maintained by parenteral electrolytes and alimentation, and his general condition improved with reduction of the blood urea nitrogen to 28 mg. per cent. On May 28, 1960 his total serum bilirubin was 0.9 mg. per cent, and on June 8, 1960 it was 0.7 mg. per cent, and his alkaline phosphatase 10.5 units. Nevertheless, the patient's mid-abdominal and low back pain continued constantly day and night and necessitated the use of narcotics frequently.

Three weeks after admission to the hospital the patient suddenly developed increased pain, nausea and vomiting. This was followed by the passage of black stools which were positive for blood. At this time the hemoglobin was found to be 8.2 gm. per cent, and the hematocrit 26 per cent.

The patient was then given one unit of whole blood and on June 19, 1960 his hemoglobin was 8.9 gm. per cent and his hematocrit 27 per cent. He subsequently received an additional 500 cc. of whole blood and his hemoglobin then remained between 9.9 gm.

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per cent, and 10.6 gm. per cent. His pain remained unchanged and he displayed no further gross evidence of bleeding. Surgery was considered, but deferred because of absence of a definite diagnosis, the increased risk due to obesity and age, and his elevated blood urea nitrogen, which was considered to be secondary to chronic urinary tract disease. It was realized that after five weeks of hospitalization with exhaustive tests that no diagnosis had resulted, but on July 7, 1960 he developed sudden dyspnea, increased back and abdominal pain, clinical signs of severe shock, brought up a small amount of bright red blood by mouth and died. It is to be noted that this patient had constant low back and abdominal pain for two and one-half months as well as known gastrointestinal bleeding of an intermittent nature for at least seven to eight weeks.

POSTMORTEM FINDINGS (N-100-60)

On opening the abdomen there was a large mass behind the third portion of the duodenum displacing it forward. The stomach, duodenum, jejunum and a portion of the ileum contained a cast-like clot of blood. In the distal duodenum where it crossed over the mass in the aorta there were two ulcers, each measuring 0.8 cm. in diameter. These appeared to perforate through the entire mucosa and muscular wall of the duodenum. Pressure on the aneurysmal mass caused blood to ooze from these ulcerated areas.

In the aorta there was an arteriosclerotic abdominal aortic aneurysm eight cm. in diameter about three cm. below the origin of the renal arteries. Sectioning of this aneurysm revealed old and new areas of clotted blood forming a thick multi-layered anterior wall. Posteriorly it was eroding into the vertebral body of L-5 with hemorrhage into the trabecular portion of this vertebral body. No abnormalities of the liver or biliary tract were found.

DISCUSSION

Of the 52 cases of arteriosclerotic abdominal aortic aneurysms with rupture into the intestine reported in the English literature, the one case reported by Baumler, and this case, the age distribution is that expected of advanced arteriosclerotic disease.

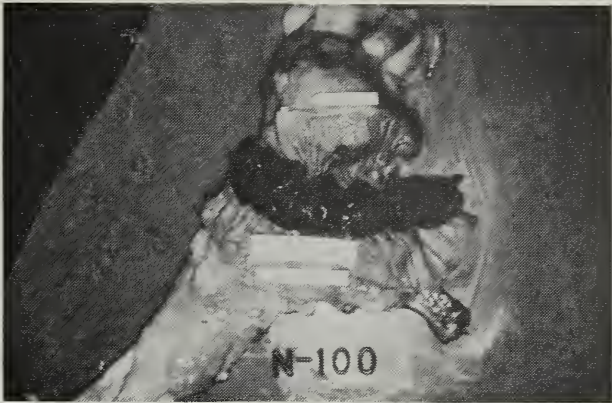


Figure 1. Autopsy specimen which shows abdominal aortic aneurysm, ulcerations into duodenum and blood filled segment of duodenum.

Age not reported	1
Under 50 years	5
6th decade	8
7th decade	17
8th decade	17
9th decade	6

Predominance in the male was nearly 4.1, and 46 of these 54 cases involved the third portion of the duodenum. The reason for the predilection for this part of the intestine is the fact that it is relatively well fixed and not easily displaced by a gradually enlarging tumor as are the stomach and remaining small intestine. The pressure of the aneurysm produces irritation which leads to fibrous adhesions, and eventually, to focal necrosis of the duodenum. Subsequently, digestive juices probably play a part in accelerating perforation of the aneurysm into the duodenum.⁴

The most common clinical manifestations were: (1) pain, (2) palpable abdominal mass, (3) hematemesis, severe or minimal, (4) melena and (5) shock. All or any combination of these signs and symptoms may be present for days, weeks or months before the sudden and dramatic demise. Even in the absence of a mass, in the older patient with severe gastrointestinal hemorrhage whose diagnostic studies are negative, the possibility of an arteriosclerotic abdominal aortic aneurysm with ulceration, erosion and perforation into the gastrointestinal tract must be considered, particularly if preceded by a history and physical signs of an abdominal aortic aneurysm, if surgical salvage is to become a reality.

As is pointed out by the present case report, and a review of previous cases, bleed-

ing into the gastrointestinal tract from an aneurysm may be of a chronic and intermittent nature. The localized nature and resectability of such aneurysms make them ideal for aggressive surgical management. If unrecognized and untreated these aneurysms eventually terminate fatally by massive gastrointestinal hemorrhage.

SUMMARY

A single case of arteriosclerotic abdominal aortic aneurysm with perforation into the third portion of the duodenum with back and abdominal pain for two and one-half months, and three recorded episodes of gas-

trointestinal bleeding over a seven to eight week period, is reported. There are 53 other cases reported in the English literature as reviewed by Baumler. In most cases there has been adequate time for diagnosis and definitive surgical therapy. This will be possible only when this unusual cause of gastrointestinal hemorrhage is considered in the differential diagnosis. □

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TULSA COUNTY MEDICAL SOCIETY WINS STATE PUBLIC RELATIONS PRIZE

The Tulsa County Medical Society has been named recipient of the 1963 Award for Distinguished Achievement by the Oklahoma Chapter of the Public Relations Society of America.

The citation was for the planning, execution, results and significance of the medical society's mass immunization for poliomyelitis conducted last year, designated as the best public relations project conducted in Oklahoma in 1963.

A plaque commemorating the honor was presented to Doctor William M. Benzing, Jr., President, at the annual banquet of the public relations group in Tulsa on March 16th.

The mass immunization, utilizing the Sabin oral polio vaccine, was effected in a series of six day-long clinics—two for each of three types of the vaccine—staffed by more than 2,000 volunteer workers. Fifty schools were used for clinic sites, and each clinic was under the direction of a member of the Tulsa County Medical Society.

The campaign immunized 75 per cent of

the population of Tulsa County, and as much as 98 per cent of some pre-school and school-age children, the groups most susceptible to polio. There has not been a single case of polio in Tulsa County for fourteen months.

The project was underwritten by the medical society and cost in excess of \$100,000. It was financed by voluntary contributions of 25 cents per dose, and the vaccine was given free to those who could not or did not wish to pay.

The society contributed all excess income—\$91,836—to 31 charities and loan funds, including the American Medical Association Education and Research Fund.

Doctor Robert K. Endres was Chairman of the steering committee for the project, which included John C. Kramer, M.D., Charles J. Lilly, M.D., V. William Wood, M.D., Earl E. Smith, Jr., M.D., Cecil F. Jacobs, M.D., Harlan Thomas, M.D., William M. Benzing, Jr., M.D., Harold E. Goldman, M.D., Paul A. Bischoff, M.D., C. Robert Cooke, M.D., Maxwell A. Johnson, M.D., and David V. Hudson, M.D. □

Iliofemoral Vein Thrombosis

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Classic treatment of "milk leg" results frequently in lifelong morbidity. Early surgical treatment gives promise of restoring normal venous circulation.

THROMBOSIS of the iliac and femoral veins produces a clinical picture which has been divided according to the extent of ischemic changes into two recognized entities, phlegmasia alba dolens and phlegmasia cerulea dolens. In the severe form of the disease (phlegmasia cerulea dolens), shock and death may occur, and gangrene of the involved extremity is a definite possibility. In both forms there is threat of pulmonary embolism. The time-honored methods of non-operative management of iliofemoral venous thrombosis result in prolonged morbidity following the acute onset of the disease, and, frequently, in lifelong disability as a result of injury to the valves of the deep veins of the extremity. Prompt recognition and surgical treatment of massive thrombosis of the iliofemoral venous system has resulted in improvement in morbidity and mortality,

and it is surprising that this treatment has not been more widely adopted. This report will document experience with nine patients encountered in the past three years at the University Medical Center.

CASE REPORTS

1. M.M. (31-59-49) a 56-year-old white female was hospitalized on the Medical Service following an episode of pulmonary embolization. Her condition was complicated by hypertension and polycythemia. Several days after admission, the patient complained of sudden pain in the left leg and the involved extremity quickly became discolored. When seen by the Surgical Service several hours after the onset, the extremity was quite edematous and markedly discolored. Pulses were not palpable below the femoral area. A diagnosis of phlegmasia cerulea dolens was made and preparations were begun for operative treatment. Before the patient reached the operating room, severe shock occurred and over a several hour period the patient failed to respond to vigorous therapy and expired.

2. L.B. (31-80-78) a 65-year-old farmer was admitted to the Medical Center two weeks after the unfortunate experience with Case No. 1. This patient gave a history of injury followed by marked transient swelling of the left leg six months before admission. The patient had been well until two days before admission, at which time pain and swelling in the left leg began suddenly

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and progressed rapidly. At the time of admission, the entire leg was markedly swollen and discolored. Pulses were present but diminished in the extremity. Operation was carried out promptly under local anesthesia and consisted of extraction of thrombus material from the iliac and femoral veins through a groin incision. Prompt relief of pain occurred, and the swelling subsided rapidly over a two day period. The patient was discharged with minimal residual edema and had no swelling in the leg one month after discharge.

3. R.B. (32-53-01) a 63-year-old white male was admitted to the Hospital three weeks after suprapubic prostatectomy complaining of pain and swelling in the left leg beginning suddenly on the day of admission. The leg was edematous and discolored and no pulses were palpable below the femoral area. Operation under local anesthesia consisted of removal of a long thrombus from the iliac and femoral veins and resulted in prompt relief of the pain. The color of the extremity become normal within several hours, and the swelling subsided over an eight day period. Three months after operation, the patient had no evidence of venous disease in the involved extremity and remains well.

4. R.H. (32-56-70) a 77-year-old white female was admitted to the Medical Center for elective right femoral hernia repair. Herniorrhaphy was accomplished without incident, but mild pain occurred in the right leg on the fourth post-operative day. On the ninth post-operative day, pain and swelling of the leg suddenly became severe, and the leg was noted to be discolored and massively edematous. Operation was carried out under local anesthesia and consisted of thrombectomy of the iliac and femoral veins through a groin incision. Good relief of pain and rapid subsidence of swelling occurred, although the patient was noted to have mild residual swelling in the leg several months after operation.

5. G.R. (33-08-92) a 60-year-old white male was admitted to the Hospital for left inguinal hernia repair. This was accomplished uneventfully under local anesthesia, but in the post-operative period, severe up-

per gastrointestinal bleeding led to gastric resection for multiple gastric ulcers. He was discharged after a stormy post-operative course, but readmitted eight days later with severe gastrointestinal symptoms due to a perforated marginal ulcer necessitating total gastrectomy. Twelve days following this procedure, marked pain and swelling in the right leg occurred and was treated about eight hours after onset by venous thrombectomy under local anesthesia. Prompt relief of pain was noted, and the leg returned to normal size when compared with the opposite extremity in six days. The post-operative course with regard to the legs was uneventful, and the patient remains well.

6. H.D. (A14712) a 71-year-old white male was admitted to the Veterans Administration Hospital of the University of Oklahoma Medical Center with a history of several days of symptoms suggestive of influenza and sudden pain and swelling in the right leg on the day of admission. Operation on the day of admission consisted of iliofemoral venous thrombectomy under local anesthesia. Good relief of pain and rapid subsidence of swelling occurred, and the patient was discharged improved.

7. Q.H. (A14951) a 70-year-old white male was admitted to the Veterans Administration Hospital at the University of Oklahoma Medical Center from a nursing home where he had been bedfast for a month. Swelling in the right leg had been noted for three days, and at the time of admission, edema and discoloration of the leg was marked. Thrombectomy under local anesthesia was quite satisfactory in terms of relief of pain and swelling.

8. M.D. (33-73-22) a 76-year-old white female was admitted to the University of Oklahoma Medical Center complaining of sudden onset of pain and swelling in the left leg on the day of admission. On examination, the entire leg was swollen and discolored, although pulses were present. Thrombectomy of the iliofemoral venous system was accomplished under local anesthesia with immediate improvement in color of the extremity and rapid disappearance of edema.

9. C.R. (25-96-41) a 42-year-old white male was admitted to the University of Oklahoma Medical Center for treatment of a duodenal ulcer. Ten days after admission,

the sudden onset of pain, discoloration, and swelling in the right leg resulted in surgical consultation. Pulses were palpable but diminished in the leg and immediate operation was planned. While the patient was being transferred to the Operating Room carrier, massive pulmonary embolization occurred. Within three minutes of the recognized onset of pulmonary embolization, cardiac arrest occurred necessitating closed chest massage. In the Operating Room, the chest was opened rapidly. Cardiac arrest was present, and the right ventricle and pulmonary artery were dilated. It was not possible to delay treatment for the time required to prepare the pump oxygenator, and therefore, the pulmonary artery was opened, thrombus material

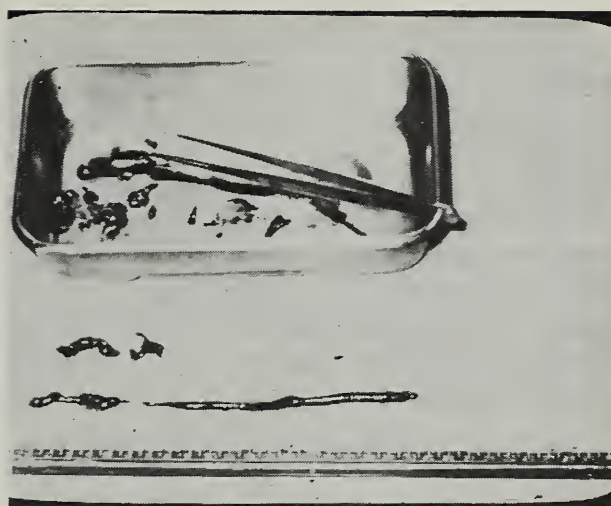


Figure 1. A photograph of thrombus material removed from patient No. 2. This is typical of the other patients as well.

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Doctor Campbell is a member of the American Surgical Association, the Society of University Surgeons, the American Association for Thoracic Surgery and the American Physiological Society.

extracted from it, and the pulmonary artery closed using manual inflow occlusion. A satisfactory heart beat was established but could not be maintained, and the patient died about one and one-half hours after the onset of pulmonary embolization. Unfortunately, autopsy permission was not obtained.

DISCUSSION

The etiology of intravascular thrombosis is unknown, and even a brief discussion of the extensive research concerning the problem is beyond the scope of this communication. A number of factors which apparently influence the development of intravascular thrombosis are appreciated, and clinically it is possible to group patients with massive iliofemoral thrombosis into several categories having similar predisposing factors. The most obvious mechanism of development of massive iliofemoral thrombosis is extension of the thrombotic process from veins in the calves of the legs. This apparently was the mechanism for development of iliofemoral thrombosis in several of the patients encountered in this series, and it is important to appreciate this mechanism as the results of surgical thrombectomy are not as satisfactory as in cases where the process begins in the iliofemoral system. In general, it has been possible to restore the venous system at least to the status preceding the development of massive iliofemoral thrombosis,

although complete removal of thrombus from the calf plexuses is usually not accomplished.^{3, 6} In a second group of patients, thrombosis of the iliac and femoral veins appears to result as an extension of thrombosis from pelvic veins. This apparently occurs in post-partum iliofemoral venous thrombosis where thrombosis at the site of placental separation may extend to pelvic veins and ultimately to the iliofemoral system. The same may be true following pelvic surgical procedures, although it is possible that direct injury to veins, position of the patient during operation, and perhaps other factors are operative in such instances. Primary thrombosis of the iliac and femoral veins apparently can occur during any illness or prolonged period of inactivity, and the mechanism for this is not well understood.

Finally, spontaneous thrombosis of the iliac and femoral system in patients who are active and apparently entirely well has been reported and was encountered in one instance in the present series.^{3, 6, 11} The possibility of direct trauma resulting in venous thrombosis is suggested by the patient in whom iliofemoral thrombosis followed hernia repair on the same side, although no injury to the venous system was recognized.

Ilio-femoral thrombosis results in varying degrees of obstruction to venous outflow from the involved extremity. When thrombosis is extensive and/or when venous collateral circulation is deficient, venous pressure may rise to a level which precludes arterial inflow, and the clinical picture of ischemia is added. Gangrene may occur. Loss of fluid into the extremity (edema) may be large enough to cause shock and death (case 1).^{2, 5, 9}

Case Number	Age	Predisposing Illness	Involved Leg	Time Interval Onset to Operation	Results	Comment
1. 31-59-49	56 F	Long chronic illness. Recent renal exploration. Pulmonary embolus prior to iliofemoral thrombosis.	Left		Died within 24 hours of recognized iliofemoral thrombosis.	Operation should have been attempted.
2. 31-80-78	65 M	Injury to leg six months before with episode of pain and swelling.	Left	8 hours	Excellent at one month.	Probably had thrombophlebitis following injury.
3. 32-53-01	63 M	Suprapubic prostatectomy three weeks prior.	Left	8 hours	Excellent at three months.	
4. 32-56-70	77 F	Right femoral hernia repair nine days prior. Mild pain in right leg five days prior.	Right	6 hours	Slight swelling of leg at five months.	No recognized trauma to vein at herniorrhaphy.
5. 33-08-92	60 M	Long illness with multiple operations.	Right	8 hours	Excellent at four months.	
6. A14712	71 M	Mild respiratory infection for several days.	Right	24 hours	Excellent immediate results.	
7. A14951	70 M	Chronic illness and prolonged bedrest.	Right	3 days	Good immediate result.	
8. 33-73-22	76 F	No prior illness or injury, apparently spontaneous onset.	Left	10 hours	Excellent early result.	
9. 25-96-41	42 M	Duodenal ulcer, pneumonitis, (? pulmonary embolus) prolonged bedrest.	Right		Died about three hours after onset of pulmonary embolus.	

TABLE 1
Summary of Cases of Ilio-femoral Venous Thrombosis

Although iliofemoral venous thrombosis is frequently confused clinically with arterial occlusion, the differences between the two ordinarily permit accurate diagnosis. Marked swelling of the entire extremity with pain, and usually discoloration, are indications of venous obstruction, and the combination does not occur with primary arterial disease. Distended superficial veins and femoral tenderness are usually present in venous thrombosis. There is little necessity for venography in the acute clinical situation. The non-operative treatment of massive venous thrombosis consists of efforts to improve venous collateral drainage by elevation of the extremity, elastic compression, and lumbar sympathetic block as well as efforts to prevent extension of thrombosis by anticoagulant therapy.¹ In 1954 Mahorner and in 1957 Mahorner and Fontaine advocated direct thrombectomy of the involved veins and presented an encouraging clinical experience.^{4, 10, 11} According to DeWeese, the procedure was first reported by Lawton in 1938. Subsequent reports have been slow in appearing, though interest appears to be increasing at the present time.^{3, 6, 7, 8} The dramatic relief of pain and discoloration and rapid subsidence of swelling, described by all authors, and noted in the series of cases reported herein, are adequate reasons for advocating operative treatment of this process. Post-operative phlebograms, reported by Mahorner and Haller, have demonstrated apparently functioning valves in the lower extremities of patients who have had massive iliofemoral venous thrombectomy, perhaps an even more important reason for considering thrombectomy as the treatment of choice for iliofemoral thrombosis.^{7, 11}

Operative treatment is performed as an emergency utilizing local anesthesia. A short groin incision is made and deepened to expose the femoral vein. The edema encountered is not troublesome and the operation is usually simple. After exposure of the common femoral vein, tapes are placed about the common, superficial, and deep femoral veins to control venous bleeding, and an incision in the common femoral vein made in a longitudinal fashion. The proximal thrombus is extruded or removed using suction and enlisting the patient's cooperation in strain-

ing the abdominal muscles. On the completion of this removal of thrombus, the vein is temporarily occluded while the distal thrombus is removed. This may be exceedingly easy but may require manipulation and "milking" of the calf and thigh in order to remove all thrombus material. Suction catheters are often helpful when thrombus material is adherent. The restoration of patent venous channels is followed by rather impressive bleeding both proximally and distally, although valves may prevent free bleeding from the iliac veins. The vein is then repaired using fine vascular suture, and heparin administered to the patient. The leg is wrapped with elastic dressings and kept elevated in the immediate post-operative period. Anticoagulant therapy is continued for two to three weeks, and patients are allowed to walk as soon as the edema has largely disappeared, usually a matter of two to three days.

The series of patients reported in this communication require little comment. In the first patient shock and death occurred, almost certainly a result of fluid loss into the involved extremity. Although attempts were made to replace blood volume, the patient's general condition deteriorated rapidly and she was never considered a reasonable operative risk. Operative treatment was uncomplicated in all patients in whom operation was carried out and blood transfusions were not required. The immediate and early results have been good but no post-operative phlebograms have been performed at the time of this report. The patients will be followed carefully, as demonstration that operation prevents the post-phlebotic syndrome may well be the strongest point in its favor. Patient nine demonstrates the hazard of venous thrombosis and the necessity for prompt and adequate surgical care of these patients.

SUMMARY AND CONCLUSIONS

1. Nine patients with massive thrombosis of the iliac and femoral veins have been recognized in the past three years at the University of Oklahoma Medical Center.
2. Ilio-femoral thrombectomy has been a simple procedure in seven patients and the early results are satisfactory.

3. Death occurred in two patients, one due to shock and the other to pulmonary embolism before iliofemoral thrombectomy could be carried out.

4. Immediate thrombectomy should be considered in every case of massive iliofemoral venous thrombosis and almost certainly represents an important advance in the treatment of this condition. ☐

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HOSPITALS ASKED TO DISCONTINUE PROFESSIONAL DISCOUNTS

The Board of Trustees of the Oklahoma Hospital Association recommended on February 12, 1964, that member hospitals discontinue the practice of granting professional discounts. Since the policy will affect physicians and their families, if adopted by state hospitals, it is reprinted below:

"Hospitals have historically granted courtesy discounts to certain categories of individuals and groups. Originally, there was probably justification for these discounts; however, through the years, most of these circumstances have changed.

"The Board of Trustees of the Oklahoma Hospital Association, Inc., believes that the discounting of hospital bills to those who can pay is contrary to the non-profit concept of the community hospital. The board further believes that the practice of giving courtesy discounts tends to have the following effects:

1. It increases the cost of care to all segments of patients, thereby increasing the burden on all others.

2. It jeopardizes the tax exempt status of a non-profit hospital.
3. It adversely affects the hospital's public relations. The public cannot understand courtesy discounts to any group or individual when discounts are based on other than economic need.
4. It discourages those discounted to from purchasing hospitalization insurance.

"Therefore, the Board of Trustees of the Oklahoma Hospital Association, Inc., does recommend that each Member Institution of the Association critically review its own discount policies, with a view toward the total elimination of all courtesy discounts.

"This statement is not intended to apply to discounts to employees; however, employee discounts as a "fringe benefit" in lieu of compensable salary should be carefully weighed as to the equity to all employees. The hospital may prefer to purchase Blue Cross coverage or commercial hospitalization insurance coverage for its employees instead of allowing a discount."

ABSTRACTS

POSSIBLE COMPLICATION OF MYOCARDIAL INFARCTION

Classically, the post-myocardial infarction syndrome is characterized by pericarditis, pneumonitis, pleural effusion, fever, pleuropericardial pain, elevated sedimentation rate, leukocytosis and a tendency to recurrence.

In eleven cases studied by the author, x-ray findings consisted of cardiac enlargement due to pericardial effusion in all eleven patients, pneumonitis in eight and pleural effusion in nine. Radiographically, this syndrome is most likely to be confused with congestive heart failure and pulmonary infarction. In the former, pulmonary congestion or edema should be present along with the enlarged heart whereas they are usually absent in the syndrome. Pulmonary infarction does not usually cause as much cardiac enlargement.

The author reports one case of this syndrome occurring in a patient without a good history of a myocardial infarction or electrocardiographic evidence of one on admission to the hospital.

It is important to recognize this syndrome since use of anticoagulants may produce a fatal hemorrhagic complication. Corticosteroids appear to be of benefit in severe cases that do not subside spontaneously. The etiology of this syndrome is not known although it has been postulated that it is due to an autoimmune phenomenon related to antibodies to necrotic tissue.

Post-myocardial Infarction Syndrome, Charles E. Shopner, M.D., *Radiology*, 81: 236, Aug. '63.

ASPECTS OF CYSTIC FIBROSIS OF THE PANCREAS

Cystic Fibrosis of the pancreas is one of the important chronic diseases of childhood. Increased awareness and development of new tests such as the sweat chloride determination have allowed earlier diagnosis and recognition of varied manifestations of the disease. The authors discuss some of the newer aspects of the disease.

Cirrhosis of the liver may occur as an isolated finding in cystic fibrosis. Most cases are clinically latent but cirrhosis has been reported to occur in as high as 37 per cent in cases over three years old.

Rectal prolapse occurs in about 20 per cent of cases due to bulky stools. Meconium ileus is present in about five per cent of cases. It should be noted that the diagnosis can be made at one day of age with the pilocarpine iontophoresis sweat test. Intestinal obstruction can occur in older children with this disease.

Generalized edema and hypoproteinemia can occur. This probably represents another cause of exudative enteropathy.

Retinal findings of venous enlargement, edema of discs and occasional retinal hemorrhage have been reported. This is possibly comparable to similar findings in adults with hypercapnia and chronic anoxia.

Enlargement of submaxillary salivary glands was

found in all cases over age six. The percentage was two per cent in normal patients.

Nasal polyps were found in 6.7 per cent of patients with the disease. They were frequently observed before cystic fibrosis was diagnosed.

A report on cardiac manifestations revealed an incidence of seven per cent of clinically evident congestive failure. There was cardiac enlargement in five per cent, and 14 per cent incidence of EKG evidence of left ventricular hypertrophy. An autopsy series showed 50 per cent of cases with evidence of congestive failure.

A reported increased incidence of diabetes in families of patients having the disease was not confirmed by another study.

Unusual x-ray findings include calcification of the pancreas, abnormal mucosal pattern of the large bowel, calcification of the peritoneum and microcolon.

It was noted that increased sweat chloride is found in glycogen storage disease and Addison's disease. Adult cases can be found by their failure to reduce their sweat chloride after three days of potent salt retainer such as 9-alpha-fluorohydrocortisone.

The authors discuss therapy only briefly but emphasize the pulmonary complications, loss of electrolytes in sweat during hot weather and the necessity of immunization.

EDITOR'S NOTE: This is an extremely brief abstract of a compact article. Those interested should read the original article and its bibliography.

Recent Developments in Cystic Fibrosis of the Pancreas, Jimmy L. Simon, M.D., Harris D. Riley, M.D., *Southern Medical Journal*, 56: 1049-1051, Sept. '63.

RECENT PUBLICATIONS

The Journal welcomes the opportunity to list current publications by any Oklahoma physician.

Effect of Daily Applications of Sodium Monofluorophosphate Solution on Caries Rate in Children. Paul W. Goaz, L. P. McElwaine, H. A. Biswell, Wayne E. White, *Journ. Dent. Res.* 42: 965-972, 1963.

Agitation, Anxiety, brain-damage and perceptual-motor deficit. O. A. Parsons, Freda Morris and J. R. Denny, *J. Clin. Psychol.* 19: 267-271, 1963.

Thoracic Emergencies in the Aged. James D. Hardy, *The Am. Journ. of Surgery*, 105: 543-552, April, 1963.

Analysis of Preclotting Technics for Prosthetic Arterial Grafts. Robert D. Wuerflein, Gilbert Campbell, *The Am. Surg.* 29: 179-182, March, 1963.

Use of the Strut Bone Graft. W. K. West, Gael R. Frank, *The Am. Surgeon*, 29: 186-189, March, 1963.

Oxygen Cost of Breathing in Children. Harold Davidson and G. G. Cayler, *The Journal of Laboratory and Clinical Medicine*, 61: 292. February, 1963.

Reprints of the above publications are usually available on request from the senior author, c/o Mrs. Joan Campbell, Veterans Administration Hospital, 921 N.E. 13th Street, Oklahoma City, Oklahoma.

Dean's Message

In 1947 the administrative position of Dean of the School of Medicine included that of Superintendent of the University Hospitals. My acceptance of this dual post was with the proviso that there be instituted a Business Administrator for fiscal affairs and a Medical Director for hospital operation.

During ensuing years, universities moved steadily away from the Dean-Superintendent designation wherever hospital operation and other enterprises not concerned solely with academic medical education were involved. The preferred title for the chief administrator became Director of the Medical Center or Vice-President of Medical (or Health) Affairs. Accordingly, in 1956, the University of Oklahoma Regents changed the appointment here to that of Director of the Medical Center and Dean of the School of Medicine. At the same time they created a separate position, Superintendent of the Hospitals to serve under the jurisdiction of the Director.

At least half of the state universities in recent years have appointed specially trained lay superintendents of their teaching hospitals. The University of Oklahoma became one of these, and consequently we encountered a need to revise some of our older procedures for maintaining professional contact and understanding between the medical staff and the superintendent.

After considerable study and consultation, the University Regents approved the establishment of a Hospital Board, consisting of the heads of all clinical departments of the School of Medicine and of those officials concerned with hospital affairs. This fairly

large group, which meets at two month intervals, provides adequate representation of the medical staff, but obviously cannot devote the time required for careful study of intricate problems. To remedy this defect, the Regents established a smaller group from the Hospital Board as a Council to prepare manageable agenda for the board.

This reorganization, in effect since last summer, has provided improved counsel to the Superintendent and the Director of the Medical Center. A major problem worked out in this manner has been the reallocation of hospital beds, taking into account requirements for teaching and cogent factors arising outside of the university. One example of the latter is the definite change in age distribution of children referred to our hospitals for medical care. Another is the fact that some clinical departments have never been provided with a minimally appropriate number of beds, a defect that can be remedied satisfactorily when additional hospital facilities are constructed. To help meanwhile, several small general admitting units for temporary occupancy are to be organized at the Children's Memorial Hospital, as was done successfully at the main hospital some years ago.

The advice and assistance which clinical staff members have given during the past months, after dedicated, patient study, constitute evidence that the Hospital Board and Council arrangement is a real improvement. It can continue to be effective in the future when dealing with such complicated problems as residency programs, out-patient operation, and detailed recommendations for the hospital construction committee. □

Mark R. Everett



OSMA ANNUAL MEETING

Renaissance '64

Officers and Trustees	153
Convention Officials	154
Digest of Events	155
Guest Speakers	159
Program Participants	160
Program	163
Technical Exhibitors	167
Related Meetings	169
President's Inaugural Dinner-Dance	170
House of Delegates Agenda	171
Delegates and Alternates	172
Reports	175
Resolutions	183
Woman's Auxiliary	193

Oklahoma State Medical Association



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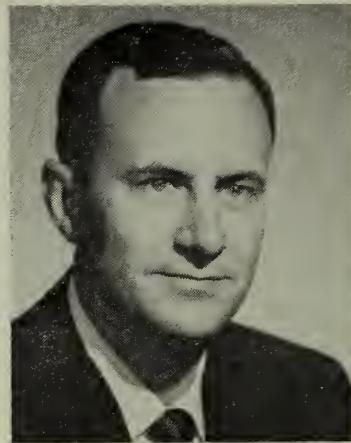
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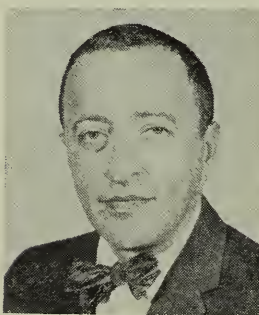
Earl M. Bricker, Jr., M.D.
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Oklahoma City



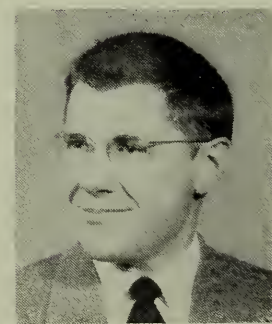
Raymond F. Hain, M.D.
Oklahoma City



Ben I. Heller, M.D.
Oklahoma City



E. H. Kalmon, M.D.
Oklahoma City



Thomas E. Nix, M.D.
Oklahoma City

Digest of Events

HOTEL ACCOMMODATIONS

Headquarters for the 58th Annual Meeting will be the Skirvin and Skirvin Tower Hotels, Oklahoma City, where a large block of rooms has been reserved for members of the Oklahoma State Medical Association. Physicians are requested to make their own reservations by writing directly to the Skirvin Hotel, Broadway and Park Avenue, Oklahoma City—providing the hotel with dates and times of arrival and departure. Other excellent downtown accommodations may be made at the Huckins Hotel, 20 North Broadway, or at the Sheraton-Oklahoma, 228 West Sheridan.

GENERAL REGISTRATION

Registration will open Friday, May 1st, at 8:30 a.m. (Scientific Program begins at 9:30 a.m.) on the second floor of the Skirvin Hotel. Members of the House of Delegates will register separately when the House convenes on Friday morning at the Huckins Hotel (see below).

BOARD OF TRUSTEES

The Board of Trustees of the Oklahoma State Medical Association will meet on Thursday afternoon, April 30th, in the Crystal Room of the Skirvin Hotel, beginning at 1:30 p.m. The annual Trustees Dinner will be held at 7:00 p.m. in the Monterey Room, preceded by a social hour at 6:00 p.m. in the Regency Room.

HOUSE OF DELEGATES

For the first time, the annual House of Delegates meeting will be divided into a two-day event. The opening session will be held on Friday morning, May 1st, in the Garden Room of the Huckins Hotel, and the closing session is scheduled for Saturday morning, May 2nd, in the Persian Room of the Skirvin Tower Hotel. Both sessions will convene at 9:00 a.m., and are expected to end by noon each day. Delegates may register for both the House of Delegates meeting and the Annual Meeting at a special registration

desk in the Huckins Hotel, beginning at 8:00 a.m., May 1st.

Reference Committees of the House of Delegates will convene at 5:00 p.m., May 1st, at the conclusion of the afternoon scientific program (to permit Delegates to attend scientific sessions). One committee will meet in the Venetian Room on the fourteenth floor of the Skirvin Hotel, and three additional committee hearings will be held on the second floor of the Skirvin in the Crystal Room, Regency Room and the Executive Suite.

All items of business will be referred by the Speaker of the House of Delegates to appropriate Reference Committees. The committees will hold open hearings where any member of the OSMA may express his views on all matters being considered. Then, the Reference Committees will go into executive session for the purpose of preparing reports and recommendations for presentation at the closing session of the House of Delegates on May 2nd.

SCIENTIFIC SESSIONS

The scientific portion of the annual meeting program will be held all day Friday and Saturday, May 1st and 2nd.

On Friday morning, "Motion Picture Clinics" will be conducted in meeting rooms on the second and fourteenth floors of the Skirvin, from 9:30 a.m. until 11:30 a.m.

An integrated program on "Blood Pressure Mechanisms" will be held Friday afternoon, from 1:00 p.m. until 5:00 p.m., in the Venetian Room, fourteenth floor.

Four "Shirt-Sleeve Sessions" are scheduled for Saturday morning, 9:30 a.m. til 11:30 a.m., May 2nd, in the Venetian, Monterey, Crystal and Regency Rooms of the Skirvin. Advanced registration is required for these informal workshop meetings. Subjects to be covered are "Common Dermatological Problems," "Diagnostic Radiology," "Clinical Laboratory Tests," and "Office Gynecology."

On Saturday afternoon, "Applied Basic Advances" will provide the theme for the concluding scientific program of the annual meeting, 1:00 p.m.-5:00 p.m.

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JOHN B. GRANDE,
PRESIDENT AND GENERAL MANAGER

A detailed scientific program appears on pages 163 to 166 of this *Journal*.

PETER E. RUSSO MEMORIAL CONFERENCE ON MEDICINE AND RELIGION

In memory of the late OSMA President-Elect, Peter E. Russo, M.D., the first OSMA Conference on Medicine and Religion will be held from 8:00 a.m.-9:30 a.m., Sunday morning, May 3rd, in the Persian Room of the Skirvin Tower. The public, lay and professional church leaders, and members of the medical profession and their families will be invited to attend this conference, which will feature outstanding medical and religious leaders. The theme: "The Relationship of the Doctor, Minister and the Patient in Illness." Details on page 166.

BUSINESS SIDE OF MEDICAL PRACTICE

One of the nation's top professional management consultants, Mr. Clayton E. Scroggins, Cincinnati, Ohio, will "teach school" on Sunday morning, from 10:00 a.m. until noon.

Four 15-minute presentations, each followed by a question and answer period, will cover such subjects as "Increasing Productivity," "Selection, Hiring and Training of Personnel," and "Solo vs. Partnership vs. Group Practice."

OMPAC LUNCHEON

All physicians and their wives who are members (or who are interested in becoming members) of the Oklahoma Medical Political Action Committee are invited to attend a special Sunday luncheon meeting, to be held on May 3rd at 12:30 p.m. in the Crystal Room of the Skirvin Hotel. The featured speaker will be Blair J. Henningsgaard, M.D., Astoria, Oregon.

Following the luncheon and program, the OMPAC members will hold their annual business meeting.

EXHIBITS

Forty technical displays by firms offering products and services to Oklahoma physicians may be seen on the fourteenth floor of the Skirvin Hotel. Exhibit hours are 9:00 a.m.-5:00 p.m. on May 1st and May 2nd, and from 9:30 a.m. until noon on May 3rd.

In addition, there will be twelve scientific and institutional exhibits located on the sec-

ond floor, surrounding the general registration desk. A lounge and the Physicians' Hobby Show will be in the same area.

HOBBY SHOW

Sponsored by the Woman's Auxiliary, the Physicians' Hobby Show will display the crafts and hobbies of Oklahoma physicians and their wives. This popular feature of the annual meeting may be seen Friday, Saturday and Sunday, on the second floor of the Skirvin.

PRESIDENT'S INAUGURAL DINNER-DANCE

On Saturday night, May 2nd, the annual President's Inaugural Dinner-Dance will be held in the Skirvin Tower's Persian Room at 7:30 p.m., preceded by a social hour at 6:30 p.m. Following dinner and the inauguration of Harlan Thomas, M.D., Tulsa, as OSMA President, physicians and their wives may dance until 1:00 a.m. to the melodies of the famous Joe Reichman Orchestra.

Tickets for the social hour, prime rib dinner and dance are only \$7.50 each. They may be ordered now from the OSMA Executive Office, Box 18696, Oklahoma City.

PAST-PRESIDENTS' BREAKFAST

The traditional breakfast for former presidents of the OSMA will be held on Saturday morning, 7:30 a.m., at the Oklahoma Medical Research Foundation, 825 N.E. 13th, Oklahoma City.

AUXILIARY MEETING

The Woman's Auxiliary to the OSMA will meet April 30-May 2nd in the Huckins and Skirvin Hotels. A full program is contained on pages 193 to 195.

SPORTS EVENTS

Golf and Tennis Tournaments are scheduled for Friday and Sunday afternoons, respectively. Golfing begins at noon at the Twin Hills Golf and Country Club, 3401 N.E. 36th (\$6.50 greens fee) and tennis matches start at noon, Oklahoma City Racquet Club, 5620 N. Portland.

Golf trophies and/or prizes will be presented at the President's Inaugural Dinner-Dance. Register for the tennis tournament at the general registration desk, second floor, Skirvin Hotel. Golfers will register at the pro shop.

ARE YOU FAMILIAR WITH THE NEW OSMA GROUP LIFE INSURANCE PROGRAM?

The Council on Insurance is happy to announce a new Group Term Life Insurance Program. Your Council has made an extensive study of other association group life insurance programs, and we now offer the lowest cost association program available today.

- ☆ Accidental death benefit included
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If Death Occurs At Age	Plan Pays This Amount of Coverage
25	\$33,125
26	32,750
27	32,625
28	32,375
29	32,000
30	31,750
31	31,250
32	30,750
33	29,875
34	29,125
35	28,125
36	26,875
37	25,625
38	24,375
39	22,875
40	21,625
41	20,250
42	18,875
43	17,500
44	16,375
45	15,250
46	14,125

If Death Occurs At Age	Plan Pays This Amount of Coverage
47	\$13,125
48	12,125
49	11,250
50	10,375
51	9,500
52	8,750
53	8,125
54	7,500
55	6,875
56	6,375
57	5,875
58	5,375
59	5,000
60	4,625
61	4,250
62	4,000
63	3,625
64	3,375
65	3,125
66	2,875
67	2,625
68	2,375
69	2,250

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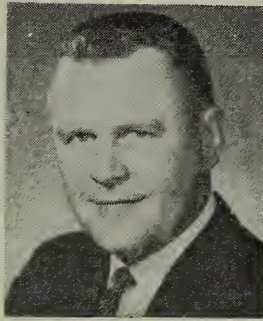
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GUEST SPEAKERS

Doctor Henningsgaard, Oregon internist, is a Director of the American Medical Political Action Committee. His state medical association has elected him to such offices as President, Speaker of the House of Delegates, and Councilor. At the present time, he is a Delegate to the AMA.

He will appear at the OMPAC LUNCHEON, Sunday noon, May 3.



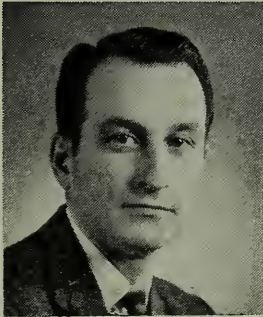
B. J. Henningsgaard, M.D.
AMPAC
Astoria, Oregon



The Reverend Jorjorian holds degrees from Northwestern University, Seabury Western Theological Seminary, and Columbia University. He is a noted author and educational leader in the field of clinical pastoral training.

He will appear Sunday morning at the Peter E. Russo Memorial Conference on Medicine and Religion.

Chaplain Armen Jorjorian
St. Luke's Episcopal
Hospital
Houston, Texas



Harold O. Perry, M.D.
Dermatology
Rochester, Minnesota

Doctor Perry is Consultant in Dermatology, Mayo Clinic, and Assistant Professor of Dermatology, Mayo Foundation Graduate School. Pre-med and medical education were received at the University of Minnesota, and he is certified by the American Board of Dermatology and Syphilology.

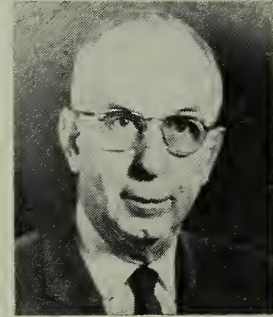
Doctor Perry will participate in the Saturday morning shirt-sleeve session on dermatology and in the afternoon program "Applied Basic Advances."



J. David Robertson, M.D.
Neuropathology
Belmont, Massachusetts

Doctor Robertson received his medical degree from Harvard Medical School, and has a Ph.D. in Biochemistry from the Massachusetts Institute of Technology. At the present time, he is Associate Professor of Neuropathology, Harvard, and Biophysicist of McLean Hospital, Belmont, Massachusetts. His research has emphasized the unit membrane concept and synaptic structure in nerve tissue.

Doctor Robertson will appear Saturday afternoon, May 2nd.



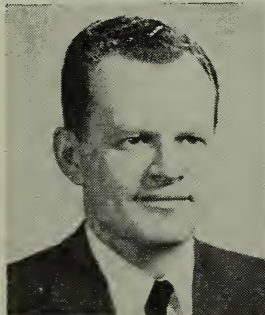
Milford O. Rouse, M.D.
Chairman, AMA Medicine and
Religion Committee
Dallas, Texas

Doctor Rouse is Chairman of the AMA's Advisory Committee on Medicine and Religion, and is Speaker of the AMA House of Delegates. Other honors include the presidencies of the Dallas Southern Clinical Society, the Texas Medical Association, and the Southern Medical Association.

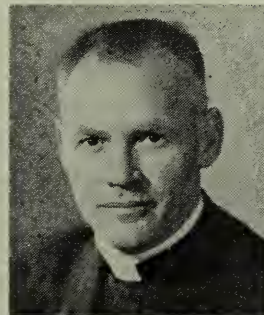
He will appear Sunday morning at the Peter E. Russo Memorial Conference on Medicine and Religion.

Mr. Scroggins operates a management firm bearing his name. He is a graduate of Ohio Wesleyan University and has been National President, Society of Professional Business Consultants. He is an Editorial Consultant for *Medical Economics Magazine*.

Mr. Scroggins will appear Sunday morning, conducting a two-hour program on "The Business Side of Medical Practice."



Clayton L. Scroggins
Professional Business
Consultant
Cincinnati, Ohio

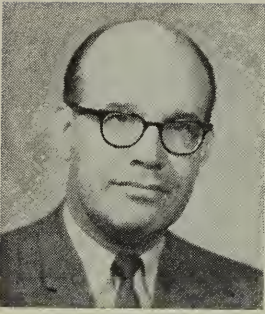


Rev. Dr. Paul B. McCleave
Director, AMA Department
of Medicine and Religion
Chicago, Illinois

The Reverend McCleave, a Presbyterian minister, graduated from the College of Emporia, Emporia, Kansas, and later took graduate study at the Presbyterian Theological Seminary, Omaha. He served as President, College of Emporia, from 1948-1952.

Reverend McCleave will appear Sunday morning, May 3rd.

Program Participants



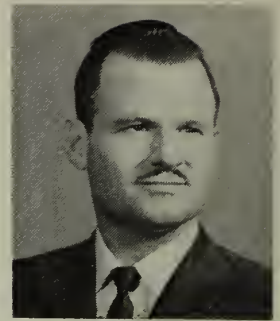
Earl M. Bricker, Jr., M.D.
Obstetrics-Gynecology
Oklahoma City



Gilbert S. Campbell, M.D.
Surgery
Oklahoma City



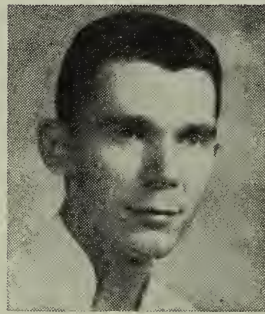
Donald G. Clements, M.D.
Radiology
Tulsa



Farris W. Coggins, M.D.
Obstetrics-Gynecology
Oklahoma City



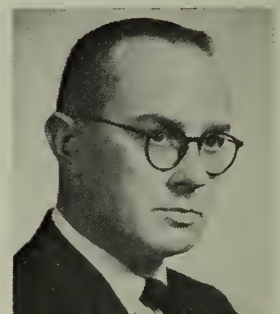
John P. Colmore, M.D.
Internal Medicine
Oklahoma City



Robert W. Dean, M.D.
Obstetrics-Gynecology
Tulsa



Jess D. Green, Jr., M.D.
Pathology
Bartlesville



C. G. Gunn, M.D.
Internal Medicine
Oklahoma City



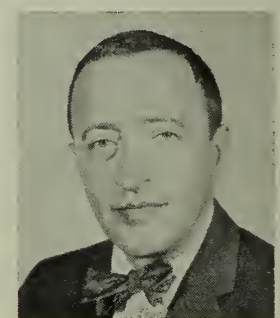
Francis J. Haddy, M.D.
Physiology
Oklahoma City



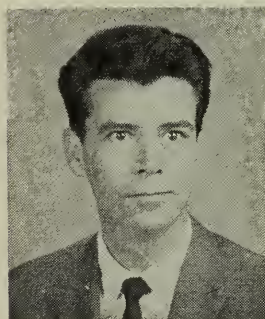
Raymond F. Hain, M.D.
Pathology
Oklahoma City



Walter K. Hartford, M.D.
Obstetrics-Gynecology
Oklahoma City



Ben I. Heller, M.D.
Internal Medicine
Oklahoma City



Jess Hensley, M.D.
Pathology
Oklahoma City



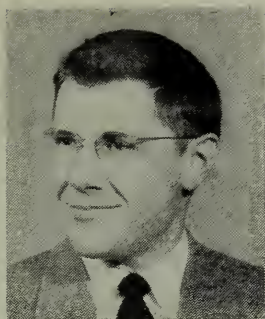
Phyllis E. Jones, M.D.
Dermatology
Oklahoma City



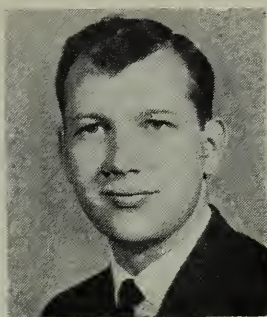
E. H. Kalmon, M.D.
Radiology
Oklahoma City



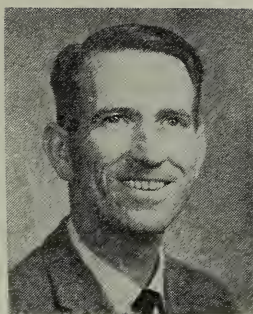
William G. McCreight, M.D.
Dermatology
Oklahoma City



Thomas E. Nix, M.D.
Dermatology
Oklahoma City



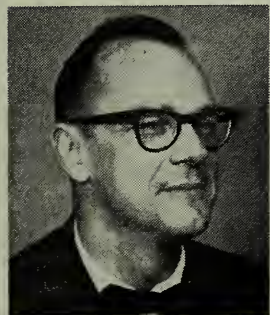
G. Victor Rohrer, M.D.
Internal Medicine
Oklahoma City



C. E. Shopfner, M.D.
Pediatric Radiology
Oklahoma City



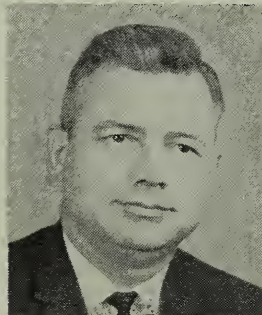
W. O. Smith, M.D.
Internal Medicine
Oklahoma City



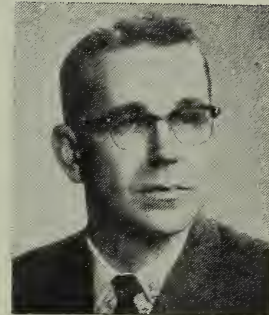
Webb M. Thompson, M.D.
Pediatric Cardiology
Oklahoma City



Sidney Traub, M.D.
Radiology
Oklahoma City

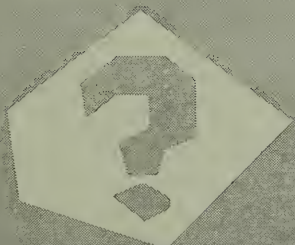


Theodore W. Violett, M.D.
Pathology
Oklahoma City



Joseph M. White, M.D.
Anesthesiology
Oklahoma City

**DOCTOR,
WHAT
IS ONE
MAJOR
PROBLEM
IN YOUR
HOSPITAL
OR CLINIC**



SPARGE
**THE SAFE - SANITARY
DISPOSABLE ENEMA KIT**
(ALSO USED AS A FEMININE HYGIENE KIT)
**INCLUDED IS A QUART SIZE FLUID
BAG, FOUR FT. HOSE, AND NOZZLE**



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OF DIMES

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SAVES TIME AND LABOR IN
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YOU ARE CORDIALLY INVITED TO BE PRESENT
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AT

THE SKIRVIN HOTEL, 14TH FLOOR

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THE OKLAHOMA STATE MEDICAL ASSOCIATION

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OKLAHOMA CITY

Friday Morning, May 1, 1964

MOTION PICTURE CLINIC I—VENETIAN ROOM, SKIRVIN HOTEL

M. Joe Crosthwait, M.D., Oklahoma City, Presiding

- 9:30 a.m. THE ESSENTIALS OF EXTERNAL CARDIO-PULMONARY RESUSCITATION
Shown with a practice manikin.—Demonstrator: David D. Snyder, M.D., *Oklahoma City*, Clinical Assistant in Surgery, O.U. Medical Center
- 9:50 a.m. Intermission—Visit Exhibits
- 10:00 a.m. MEDICAL GRAND ROUNDS—DIAGNOSIS AND MANAGEMENT OF ACUTE ABDOMINAL PROBLEMS
- 11:00 a.m. Intermission—Visit Exhibits
- 11:05 a.m. NO REAL PATHOLOGY
- 11:30 a.m. ADJOURNMENT

MOTION PICTURE CLINIC II—CRYSTAL ROOM, SKIRVIN HOTEL

M. Joe Crosthwait, M.D., Oklahoma City, Presiding

- 9:30 a.m. ESSENTIALS OF NEUROLOGICAL EXAMINATIONS
- 10:20 a.m. Intermission—Visit Exhibits
- 10:30 a.m. CURRENT TRENDS IN THE CLINICAL MANAGEMENT OF DIABETES
- 10:50 a.m. Intermission—Visit Exhibits
- 11:00 a.m. THE ESSENTIALS OF EXTERNAL CARDIO-PULMONARY RESUSCITATION
Demonstration by Doctor Snyder
- 11:30 a.m. ADJOURNMENT

Friday Afternoon, May 1, 1964

BLOOD PRESSURE MECHANISMS—VENETIAN ROOM, SKIRVIN HOTEL

Ben I. Heller, M.D., Oklahoma City, Presiding

- 1:00 p.m. INTRODUCTORY REMARKS
Ben I. Heller, M.D., *Oklahoma City*, Professor and Head, Department of Clinical Pathology, O.U. Medical Center
- 1:05 p.m. FACTORS REGULATING BLOOD PRESSURE
Francis J. Haddy, M.D., Ph.D., *Oklahoma City*, Professor and Head, Department of Physiology, O.U. Medical Center
A discussion of factors involved in the regulation of blood pressure, using a schematic diagram to explain the hemodynamic, neurogenic, hormonal and other factors concerned.
- 1:30 p.m. ABNORMAL BLOOD PRESSURE
Doctor Haddy
A discussion of various forms of hypertension and hypotension
- 2:00 p.m. CASE PRESENTATIONS—HIGH AND LOW BLOOD PRESSURE*
Presented by:
G. Victor Rohrer, M.D., *Oklahoma City*, Clinical Assistant in Internal Medicine, O.U. Medical Center
Discussants:
W. O. Smith, M.D., *Oklahoma City*, Chief of Medical Service, Veterans Administration Hospital
Doctor Heller
Gilbert S. Campbell, M.D., *Oklahoma City*, Professor of Surgery and Chief of Thoracic Surgery, O.U. Medical Center
Joseph M. White, M.D., *Oklahoma City*, Professor and Head, Department of Anesthesiology, O.U. Medical Center
*Questions from the floor invited
- 2:50 p.m. Intermission—Visit Exhibits
- 3:05 p.m. THE MANAGEMENT OF ABNORMAL BLOOD PRESSURE
John P. Colmore, M.D., *Oklahoma City*, Associate Professor of Medicine and Director, Experimental Therapeutics Unit of the Department of Medicine, O.U. Medical Center
A discussion of drug therapy in the management of hypertension and hypotension
- 3:45 p.m. PANEL DISCUSSION OF BLOOD PRESSURE PROBLEMS*
Moderator: Doctor Heller

Medicine: Doctor Colmore
Surgery: Doctor Campbell
Physiology: Doctor Haddy
Anesthesiology: Doctor White
Pediatrics: Webb M. Thompson, M.D., *Oklahoma City*, Assistant Professor
of Pediatrics, O.U. Medical Center
*Specific clinical problems, research, and current concepts of hypertension and
hypotension in medicine, pediatrics and surgery*

*Questions from the floor invited

5:00 p.m. ADJOURNMENT

Saturday Morning, May 2, 1964

*(Four simultaneous "Shirtsleeve Sessions" are planned, if pre-registration shows
sufficient interest in the courses offered. Physicians have been asked to pre-
register for their first and second choices of the following selection)*

COURSE I—COMMON DERMATOLOGICAL PROBLEMS MONTERREY ROOM—SKIRVIN HOTEL

Thomas E. Nix, Jr., M.D., Oklahoma City, Presiding

- 9:30 a.m. Moderator: Thomas E. Nix, Jr., *Oklahoma City*, Instructor in the Depart-
to ment of Dermatology, O.U. Medical Center
11:30 a.m. Participants:
Harold O. Perry, M.D., *Rochester, Minnesota*, Consultant in Dermatology,
Mayo Clinic, and Assistant Professor of Dermatology, Mayo Foundation
Graduate School, University of Minnesota
Phyllis E. Jones, M.D., *Oklahoma City*, Clinical Professor and Chairman of
the Department of Dermatology, O.U. Medical Center
William G. McCreight, M.D., *Oklahoma City*, Associate Professor of Derma-
tology, O.U. Medical Center
*Diagnosis and treatment of tinea, psoriasis, allergic dermatitis, warts and
other dermatoses*

COURSE II—DIAGNOSTIC RADIOLOGY CRYSTAL ROOM—SKIRVIN HOTEL

E. H. Kalmon, M.D., Oklahoma City, Presiding

- 9:30 a.m. PLAIN FILM DIAGNOSIS OF THE HERNIATED LUMBAR DISC
Sidney Traub, M.D., *Oklahoma City*, Professor and Head, Department of
Radiology, O.U. Medical Center
9:45 a.m. PLAIN FILM DIAGNOSIS OF THE ACUTE ABDOMEN
Donald G. Clements, M.D., *Tulsa*
10:00 a.m. BRONCHIOLAR CARCINOMA
E. H. Kalmon, M.D., *Oklahoma City*, Associate Professor of Radiology, O.U.
Medical Center
10:15 a.m. WHAT'S NEW IN PEDIATRIC RADIOLOGY?
Charles E. Shopfner, M.D., *Oklahoma City*, Associate Professor of Radiology,
O.U. Medical Center
10:30 a.m. PROBLEM FILM CLINIC
*Registrants may present their own films, with concise histories, to the panel
for discussion*

COURSE III—CLINICAL LABORATORY TESTS REGENCY ROOM—SKIRVIN HOTEL

Raymond F. Hain, M.D., Oklahoma City, Presiding

- 9:30 a.m. CURBSTONE CONSULTATIONS ON OLD AND NEW TESTS—THEIR RELIA-
to BILITY, INTERPRETATION AND JUSTIFICATION
11:30 a.m. Moderator: Raymond F. Hain, M.D., *Oklahoma City*, President of The Okla-
homa Association of Pathologists, Associate Professor of Pathology, O.U.
Medical Center

Panelists:

Jess D. Green, Jr., M.D., *Bartlesville*

Jess Hensley, M.D., *Oklahoma City*

Theodore W. Violet, M.D., *Oklahoma City*

SAMPLE PROBLEM CASES TO BE DISCUSSED, AS TIME ALLOWS:

Problem I: Two patients suspected of having myocardial infarct. SGOT in first patient is 28, SGOT in second patient is 830. Which patient has an infarct?

Problem II: Patient being evaluated for possible pregnancy. Immunologic test is positive and the frog test is negative. Is she or is she not pregnant?

**COURSE IV—OFFICE GYNECOLOGY
VENETIAN ROOM—SKIRVIN HOTEL**

Earl M. Bricker, Jr., M.D., Oklahoma City, Presiding

9:30 a.m. THE STERILE COUPLE

Earl M. Bricker, Jr., M.D., *Oklahoma City*, Clinical Instructor, Department of Obstetrics and Gynecology, O.U. Medical Center

10:00 a.m. THE USE OF PESSARIES

Robert W. Dean, M.D., *Tulsa*

10:30 a.m. DIAGNOSIS AND TREATMENT OF VAGINAL DISCHARGE

Farris W. Coggins, M.D., *Oklahoma City*, Assistant Clinical Professor, Department of Obstetrics and Gynecology, O.U. Medical Center

11:00 a.m. CYTOLOGY

Walter K. Hartford, M.D., *Oklahoma City*, Associate Clinical Professor, Department of Obstetrics and Gynecology, O.U. Medical Center

Saturday Afternoon, May 2, 1964

APPLIED BASIC ADVANCES—VENETIAN ROOM, SKIRVIN HOTEL

R. R. Hannas, Jr., M.D., Sentinel, Presiding

1:00 p.m. INTRODUCTORY REMARKS

R. R. Hannas, Jr., M.D., *Sentinel*, Assistant Clinical Professor of Medicine, O.U. Medical Center

1:05 p.m. THE DIVERSE CLINICAL MANIFESTATIONS OF PORPHYRIN METABOLIC DISORDERS—A MULTIPLE SYSTEM DISEASE

Harold O. Perry, M.D., *Mayo Clinic, Rochester, Minnesota*

Pathogenesis, diagnosis and management of an often unrecognized disease involving nervous system, liver, blood, gastrointestinal tract and skin

1:45 p.m. THE CELL AS IT IS KNOWN TO BE—THE UNIT MEMBRANE

J. David Robertson, M.D., *Belmont, Massachusetts*, Assistant Professor of Neuropathology, Harvard Medical School

An updating of knowledge of the target of our therapy

2:35 p.m. Intermission—Visit Exhibits

2:50 p.m. PULMONARY CIRCULATION—APPLIED PHYSIOLOGY IN PATIENT CARE

Gilbert S. Campbell, M.D., *Oklahoma City*, Professor of Surgery and Chief of Thoracic Surgery, O.U. Medical Center

3:30 p.m. PANEL: CLINICAL IMPLICATIONS OF THE ABOVE SUBJECTS

Moderator: Doctor Hannas

Panelists:

Doctors Perry, Campbell, Robertson, and C. G. Gunn, M.D., Associate Professor of Medicine and Physiology, O.U. Medical Center

5:00 p.m. ADJOURNMENT

Saturday Evening, May 2, 1964

PRESIDENT'S INAUGURAL DINNER-DANCE—PERSIAN ROOM, SKIRVIN TOWER

6:30 p.m. SOCIAL HOUR, PRIME RIB DINNER, INAUGURAL CEREMONIES AND
to DANCING TO THE JOE REICHMAN ORCHESTRA

1:00 a.m.

Sunday Morning, May 3, 1964

PETER E. RUSSO MEMORIAL CONFERENCE ON MEDICINE AND RELIGION— PERSIAN ROOM, SKIRVIN TOWER

Allen E. Greer, M.D., Oklahoma City, Presiding

*Man is a whole being, and in ill health, he requires total care and treatment.
A discussion of the physical, spiritual, mental and social factors affecting health.*

- 8:00 a.m. INTRODUCTORY REMARKS
Allen E. Greer, M.D., Oklahoma City, Chairman, OSMA Medicine and Religion Committee
- 8:05 a.m. THE RELATIONSHIP OF THE DOCTOR, MINISTER AND PATIENT IN ILLNESS
Rev. Dr. Paul B. McCleave, Chicago, Director, Department of Medicine and Religion, American Medical Association
- 8:10 a.m. A PHYSICIAN'S VIEWPOINT
Milford O. Rouse, M.D., Dallas, Chairman of the AMA's Advisory Committee on Medicine and Religion; and Speaker of the House of Delegates, American Medical Association
- 8:40 a.m. THE MINISTER'S RESPONSIBILITY
Rev. Armen D. Jorjorian, Houston, Religious Director and Chaplain, St. Luke's Episcopal Hospital
- 9:10 a.m. CASES OF NEED FOR THE DOCTOR-MINISTER TEAM
Moderator: Reverend McCleave
Discussants: Doctor Rouse and Reverend Jorjorian
- 9:30 a.m. ADJOURNMENT

THE BUSINESS SIDE OF MEDICAL PRACTICE VENETIAN ROOM—SKIRVIN HOTEL

Irwin H. Brown, M.D., Oklahoma City, Presiding

- 10:00 a.m. INTRODUCTORY REMARKS
Irwin H. Brown, M.D., Oklahoma City, Program Chairman, Annual Meeting of the Oklahoma State Medical Association
- 10:05 a.m. MEDICAL ECONOMICS AND YOU
Clayton L. Scroggins, Cincinnati, owner of Clayton L. Scroggins Associates—Professional Business Management
Question and Answer Period
- 10:30 a.m. INCREASING PRODUCTIVITY
Mr. Scroggins
Question and Answer Period
- 11:00 a.m. PERSONNEL—SELECTING, HIRING AND TRAINING
Mr. Scroggins
Question and Answer Period
- 11:30 a.m. ASSOCIATION PRACTICE—SOLO VS. PARTNERSHIP VS. GROUP PRACTICE
Mr. Scroggins
Question and Answer Period

Sunday, 12:30 p.m., May 3, 1964

LUNCHEON—OKLAHOMA MEDICAL POLITICAL ACTION COMMITTEE CRYSTAL ROOM—SKIRVIN HOTEL

- 12:30 p.m. THE ANNUAL LUNCHEON MEETING OF OMPAC
to Physicians and their wives are invited—whether OMPAC members or not—
- 2:00 p.m. to attend the luncheon and hear Blair J. Henningsgaard, M.D., Astoria, Oregon, speak on "The Role of Oklahoma Physicians in Political Action." Doctor Henningsgaard is a Director of the American Medical Political Action Committee. Tickets are \$3.00 each, available at the general registration desk. Following the luncheon and talk, the annual business meeting will be conducted for OMPAC members.

Technical Exhibitors

The Technical Exhibitors of the 58th Annual Meeting of the Oklahoma State Medical Association will be located on the 14th floor, Skirvin Hotel, in the immediate vicinity of the main lecture room.

Displays will be featured by the following firms:

Abbott Laboratories

Allergy Laboratories, Inc.

Blue Cross-Blue Shield Plans of Oklahoma

Catlin Aviation Company

Ciba Pharmaceutical Products, Inc.

The Coca-Cola Company

Dictaphone Corporation

Electrodyne Company, Inc.

Encyclopaedia Britannica

First National Bank and Trust Company

C. L. Frates & Co., Inc.

Geigy Pharmaceuticals

Great Books of the Western World

Kay Pharmacal Company

Kinser Manufacturing Company

Massachusetts Mutual Life Insurance Co.

Eli Lilly and Company*

Mead Johnson & Company

Medco Products Company

Merck Sharp & Dohme

Merrill Lynch, Pierce, Fenner & Smith

The Mid-West Surgical Supply Company

Mutual Benefit Insurance Company

Oklahoma Association of Electric

Cooperatives, Inc.

Ortho Pharmaceutical Corporation

Parke, Davis & Company

Pfizer Laboratories

R. J. Reynolds Tobacco Company

S.C.M. Corporation

St. Paul Insurance Companies

Sandoz Pharmaceuticals

Julius Schmid, Inc.

G. D. Searle & Company

7-Up Bottling Company

E. R. Squibb & Sons

S. J. Tutag & Company

The Upjohn Company

Wallace Laboratories

Warner-Chilcott Laboratories

Westwood Pharmaceuticals

Zimmer Fracture Equipment

*Contributor to the scientific program.



Oklahoma REC's Are Curing Many of the Ills of Rural Living

It hasn't been so long ago that "outdoor plumbing" was a part of rural living — and a public health hazard. But Oklahoma's Rural Electric Cooperatives have changed the "path" to a bath with plentiful, low-cost electricity that makes an adequate water supply and modern sanitation possible.

Today, more than ever before, Oklahoma REC's make rural living a rewarding way of life, because REC electricity means modern lights, heat, and refrigeration to rural families. Not only do Oklahoma's farm families now have the necessities of modern sanitation and refrigeration, but also they enjoy the many labor-saving electrical appliances and machines that give them more leisure time because of electricity from REC.

You and your family benefit from Oklahoma REC electricity, too. Because electric cooperatives are working out in the country, providing power for Oklahoma's food and fiber producers, your wife buys more food of better quality for less money at her supermarket. And you, better than most people, know that the food on your table is fresher, cleaner, healthier, because REC electricity makes modern refrigeration and sanitation possible.

The next time you drink a glass of pure milk, eat a sizzling steak, enjoy a weekend at an isolated lakeside cabin with lights, refrigeration and modern plumbing, or stop for gas at a filling station far from other power sources, remember . . .

One of Oklahoma's Great Tax-Paying, Free Enterprise Businesses . . .



OKLAHOMA RURAL ELECTRIC COOPERATIVES

Related Meetings

Oklahoma Chapter, American College of Surgeons

Chapter members and wives will hold their annual buffet dinner meeting May 1st, in the large meeting room on the fifth floor of the Skirvin Tower Hotel, beginning with cocktails at 6:00 p.m., and dinner at 7:00 p.m.

Oklahoma Medical Political Action Committee

A luncheon meeting will be held Sunday, May 3rd, at 12:30 p.m. in the Crystal Room of the Skirvin Hotel. The featured speaker will be Blair J. Henningsgaard, M.D., AMPAC Director from Astoria, Oregon, who will speak on "The Role of Oklahoma Physicians in Political Action." Tickets are \$3.00, available at the General Registration Desk, OSMA Annual Meeting, Skirvin Hotel. All OSMA members are welcome.

Following the luncheon and address by Doctor Henningsgaard, OMPAC members will conduct the group's annual business meeting in the same room for the purpose of electing officers and board of directors.

Oklahoma Chapter, American College of Chest Physicians

On Friday, May 1st, a dinner meeting for chapter members is scheduled for the Monterrey Room, Skirvin Hotel, beginning with cocktails at 6:00 p.m. Tickets are \$5.50 each, available by writing Dick Huff, M.D., Pasteur Building, Oklahoma City, or may be purchased at the door.

Oklahoma State Radiological Society

A business meeting of the society will be held on Friday, May 1st, at 5:00 p.m. in Room C, Skirvin Tower Hotel (take elevator to the fourth floor).

Oklahoma Society of Internal Medicine

Members of the society and wives will meet for cocktails at 6:15 p.m., followed by dinner at 7:15 p.m., in the Park Avenue Suite on the Fifth Floor of the Skirvin Tower Hotel. Council members will hold a business meeting at 5:00 p.m. in the same suite.

Oklahoma Chapter, International College of Surgeons

A 7:30 a.m. breakfast meeting for chapter members is scheduled for May 2nd in the Monterrey Room of the Skirvin Hotel. Tickets are \$2.25, available at the door.

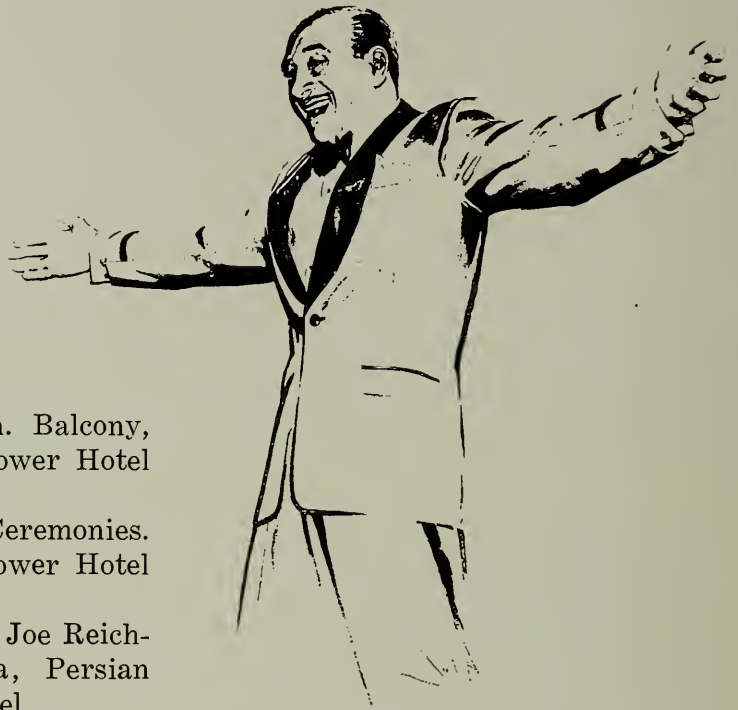
Past-Presidents' Breakfast

The traditional breakfast meeting for former presidents of the Oklahoma State Medical Association will be held on Saturday morning, May 2nd, at 7:30 a.m., in the Oklahoma Medical Research Foundation Building, 825 Northeast 13th Street, Oklahoma City.

Oklahoma Dermatological Society

Members and invited guests will have a presentation of unusual dermatological cases in the Outpatient Department, University of Oklahoma Medical Center at 9:00 a.m., Sunday, May 3rd. Discussion will follow at 10:30 a.m. in 8-E Auditorium, University Hospitals.

President's Inaugural Dinner-Dance



SATURDAY, MAY 2, 1964

- 6:30 p.m. Social Hour and Reception. Balcony, Persian Room, Skirvin Tower Hotel
- 7:30 p.m. Dinner and Inaugural Ceremonies. Persian Room, Skirvin Tower Hotel
- 9:00 p.m. Annual Dance. Featuring Joe Reichman and his orchestra, Persian Room, Skirvin Tower Hotel

The social highlight of the annual meeting will be the President's Inaugural Dinner-Dance, appropriately arranged for Saturday night, midway through the meeting. You and your wife are promised a delightful evening of good food, entertainment and fellowship with your professional colleagues.

Inaugural ceremonies will see Joe L. Duer, M.D., Woodward, turn over association leadership to incoming OSMA President Harlan Thomas, M.D., Tulsa. More than five hundred physicians and wives are expected to attend.

Joe Reichman and his orchestra have

played in most of the nation's leading hotels—including the Waldorf-Astoria in New York City, the New Yorker, the Statler chain, the Mark Hopkins and Fairmont in San Francisco, and the Roosevelt in New Orleans.

The music is lighthearted and gay, fast and slow, sweet and loud—or, as Reichman says, "whatever the people want to hear." No matter what he plays, the beat is there and the tune is danceable.

Don't miss Joe Reichman — "The Pagliacci of the Piano," one of the country's best all-around entertainers!

TICKETS

Social hour, prime rib of beef dinner, inaugural ceremonies, plus the finest of entertainment—all yours for only \$7.50 per person! Attendance will be limited to room capacity, so order your tickets in advance from the OSMA, Box 18696, Oklahoma City. Tickets for the best evening of the year will be sent to you by return mail.

A G E N D A *

House of Delegates Meetings

OPENING SESSION

9:00 a.m., May 1st, Garden Room, Huckins Hotel

- | | |
|-------------------------------------|--|
| I. Call to Order | VI. Report of President |
| II. Report of Credentials Committee | VII. Board of Trustees Report |
| III. Introduction of Guests | VIII. Council, Committee Reports |
| IV. Remarks of Speaker | IX. Introduction of Resolutions, Amendments to the Constitution and Bylaws |
| V. Nomination of Officers | X. Necrology Report |

(Reference Committees will meet at 5:00 p.m., May 1st, in the Skirvin Hotel)

CLOSING SESSION

9:00 a.m., May 2nd, Persian Room, Skirvin Tower

- I. Call to Order
- II. Reference Committee Reports
- III. Election of Officers
- IV. Adjournment

*Condensed Version, Subject to Modification

OFFICERS TO BE ELECTED

President-Elect (One Year Term)
Vice-President (One Year Term)
Secretary-Treasurer (Two Year Term)
Speaker, House of Delegates (Two Year Term)
Vice-Speaker, House of Delegates (Two Year Term)
Delegate to the Ama (Two Year Term)
Alternate Delegate to the AMA (Two Year Term)
Trustees From Districts III, VI, IX, and XII

Oklahoma State Medical Association

1964 DELEGATES AND ALTERNATES

SOCIETY	DELEGATE	ALTERNATE
ALFALFA WOODS	Merle D. Carter, M.D., Waynoka	Forest Hale, M.D., Cherokee
ATOKA BRYAN COAL	Robert H. Hayes, M.D., Atoka	Leroy L. Engles, M.D., Durant
BECKHAM (Roger Mills)	William Leebron, M.D., Elk City	L. V. Baker, Jr., M.D., Elk City
BLAINE	(not reported)	
CADDO	E. T. Cook, Jr., M.D., Anadarko	G. C. Markert, M.D., Anadarko
CANADIAN	F. W. Hollingsworth, M.D., El Reno	Edgar W. Young, Jr., M.D., El Reno
CARTER LOVE	Roger Reid, M.D., Ardmore	Claude H. B. Brown, M.D., Ardmore
MARSHALL	Frank W. Clark, M.D., Ardmore	Don Mannerberg, M.D., Ardmore
CHOCTAW PUSHMATAHA	Bill E. Woodruff, M.D., Hugo	Floyd L. Waters, M.D., Hugo
CLEVELAND McCLAIN	W. C. McCurdy, Jr., M.D., Purcell	R. C. Mayfield, M.D., Norman
	Roy W. Donaghe, M.D., Norman	Don Dycus, M.D., Norman
	W. R. Patten, M.D., Norman	Y. E. Parkhurst, M.D., Norman
COMANCHE COTTON	W. A. Matthey, M.D., Lawton	Robert Dennis, M.D., Lawton
COOKSON HILLS (Cherokee, Adair and Sequoyah)	Melton Meek, M.D., Lawton	W. P. Jolly, M.D., Lawton
	Edwin Pointer, M.D., Sallisaw	Bill Wamack, M.D., Tahlequah
CRAIG DELAWARE OTTAWA	Donald Olson, M.D., Vinita	David Carson, M.D., Fairland
CREEK		
CUSTER	Robert White, M.D., Sapulpa	C. E. Woodard, M.D., Drumright
EAST CENTRAL (Muskogee, Wagoner and McIntosh)	C. B. Cunningham, M.D., Clinton	Ross Deputy, M.D., Clinton
	Marvin Elkins, M.D., Muskogee	Port Johnson, M.D., Muskogee
	LeRoy Leonard, M.D., Wagoner	Albert Krause, M.D., Muskogee
	Glen Berkenbile, M.D., Muskogee	David Watson, M.D., Muskogee
GARFIELD KINGFISHER (Major)	Mark D. Holcomb, M.D., Enid	Fred R. Merrifield, Jr., M.D., Enid
	Paul H. Rempel, M.D., Enid	Alfred M. Shideler, M.D., Enid
GARVIN	Ray V. McIntyre, M.D., Kingfisher	J. R. Taylor, M.D., Kingfisher
GRADY	John M. Moore, M.D., Pauls Valley	John A. Graham, M.D., Pauls Valley
GRANT	B. C. Chatham, M.D., Chickasha	Wesley W. Davis, M.D., Chickasha
GREER	F. P. Robinson, M.D., Pond Creek	
HUGHES SEMINOLE	Fred W. Sellers, M.D., Mangum	H. H. Lenaburg, M.D., Mangum
	Claude B. Knight, M.D., Wewoka	L. A. S. Johnston, M.D., Holdenville
JACKSON (Harmon)	Wayne A. Starkey, M.D., Altus	Malcolm Mollison, M.D., Altus
JEFFERSON		
KAY NOBLE	Harold Stout, M.D., Waurika	Lee Pullen, M.D., Waurika
	Robert F. Morgan, M.D., Blackwell	Donald Becker, M.D., Blackwell
	Edwin Fair, M.D., Ponca City	Jack O. Alexander, M.D., Ponca City
	C. H. Cooke, M.D., Perry	Bill Simon, M.D., Perry
	Wilson Mahone, M.D., Hobart	William Bernell, M.D., Hobart
KIOWA WASHITA		
LeFLORE HASKELL	C. S. Cunningham, M.D., Poteau	R. W. Lowrey, M.D., Poteau
LINCOLN		
LOGAN	Michael N. Burleson, M.D., Prague	C. W. Robertson, M.D., Chandler
McCURTAIN	L. H. Ritzhaupt, M.D., Guthrie	James S. Petty, M.D., Guthrie
	(not reported)	
MURRAY	R. W. Morton, M.D., Sulphur	
NORTHWESTERN (Beaver, Dewey Ellis, Harner and Woodward)	R. G. Obermiller, M.D., Woodward	William A. Crockett, M.D., Woodward
	Haskell Newman, M.D., Shattuck	Leo Meese, M.D., Laverne

**OKFUSKEE
OKLAHOMA**

Charles C. Elliott, M.D., Okemah
 *David R. Brown, M.D.
 Arthur F. Elliott, M.D.
 Cecil R. Stansberry, M.D.
 Elwood Herndon, M.D.
 John A. Blaschke, M.D.
 Lloyd A. Owens, M.D.
 Lewis C. Taylor, M.D.
 Charles E. Delhotal, M.D.
 Charles H. Wilson, M.D.
 Galen P. Robbins, M.D.
 James R. Riggall, M.D.
 J. J. Donnell, M.D.
 E. A. Walker, Jr., M.D.
 Nolen L. Armstrong, M.D.
 William R. Cleaver, M.D.
 John W. DeVore, M.D.
 Ancel Earp, Jr., M.D.
 Robert S. Ellis, M.D.
 G. Rainey Williams, M.D.
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 Rex Daugherty, M.D., Pawhuska
 Powell E. Fry, M.D., Stillwater
 Robert D. Hargrove, M.D., Pawnee
 Floyd T. Bartheld, M.D., McAlester

Ollie McBride, M.D., Ada
 D. C. Ramsay, M.D., Ada
 Leon Combs, M.D., Shawnee
 Jerry Puls, M.D., Pryor

C. N. Talley, M.D., Marlow
 E. L. Buford, M.D., Guymon

Jack D. Honaker, M.D., Frederick

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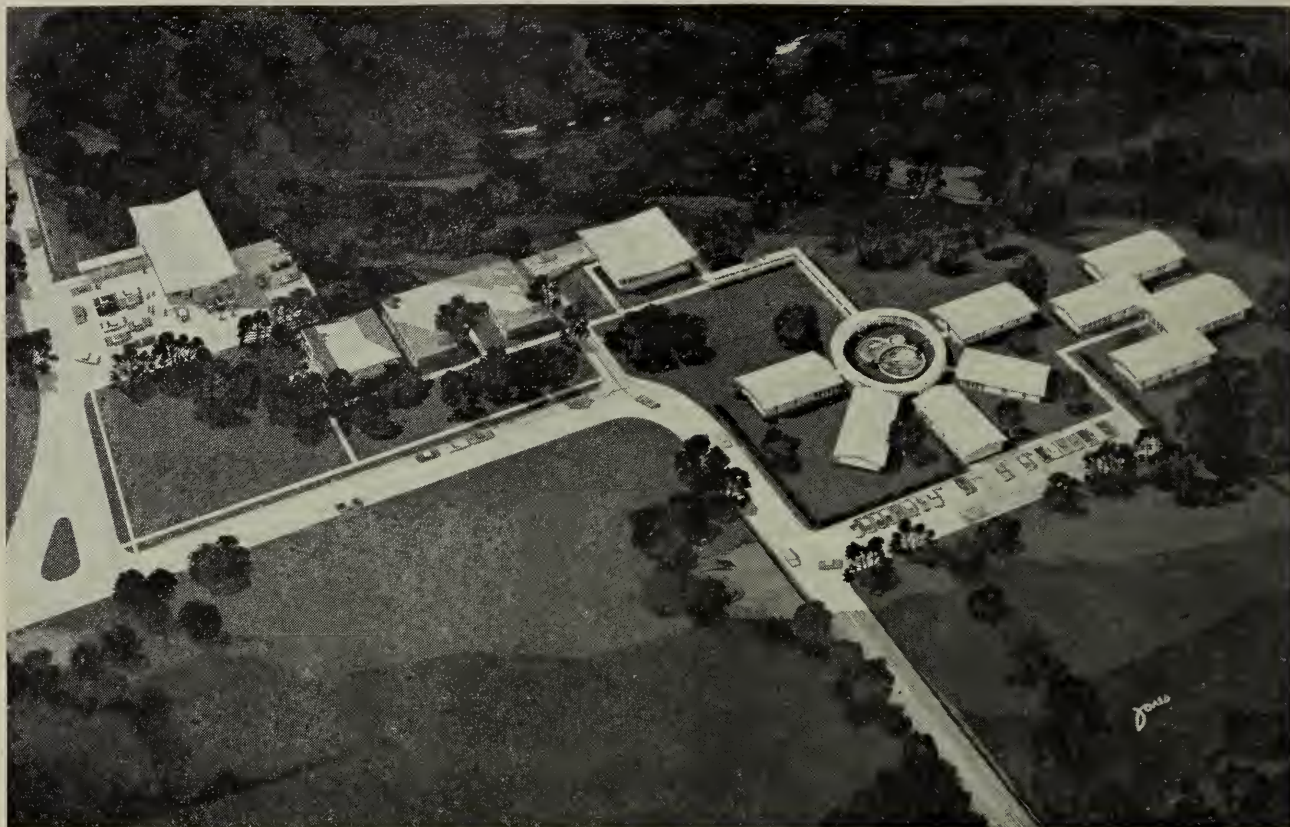
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Dallas 11, Texas



FE 1-8331

HOUSE OF DELEGATES: BUSINESS AFFAIRS

The following reports and resolutions are brought to the attention of county medical societies. The items reported here represent those received in time for publication in advance of the meeting. Reports and proposals received subsequently will be reproduced and inserted in the portfolios now being prepared for each county society delegate.

COUNCIL ON PUBLIC HEALTH

Report to the House of Delegates

May 1, 1964

Council Members

Hayden H. Donahue, M.D., Chairman	Oklahoma City
Gifford H. Henry, M.D.	Tulsa
Don H. O'Donoghue, M.D.	Oklahoma City
John W. Records, M.D.	Oklahoma City
Kirk T. Mosley, M.D.	Oklahoma City
John X. Blender, M.D.	Cherokee
John W. Shackelford, M.D.	Oklahoma City
Ella Mary George, M.D.	Oklahoma City
Francis A. Davis, M.D.	Shawnee
J. Walker Morledge, M.D.	Oklahoma City
George H. Guthrey, M.D.	Oklahoma City
William H. Reiff, M.D.	Oklahoma City
Robert L. Loftin, M.D.	Broken Bow
Avery B. Wight, M.D.	Enid
Joe M. Parker, M.D.	Oklahoma City
Nolen L. Armstrong, M.D.	Oklahoma City
William K. Ishmael, M.D.	Oklahoma City

The Council on Public Health is comprised of the following committees:

Cancer: Joe M. Parker, M.D.

Disaster Medical Care: Gifford H. Henry, M.D.,
Chairman

Rehabilitation: William K. Ishmael, M.D., Chairman

Perinatal Problems: John W. Records, M.D., Chair-
man

Maternal Mortality: John W. Records, M.D., Chair-
man

Mental Health: George H. Guthrey, M.D., Chairman

SECTION I

SPECIAL COUNCIL ACTIVITIES

A. *Immunization Education*: At the direction of the House of Delegates, per their approval of last year's Council report, the Council sponsored, in cooperation with the State Health Department, "Health Protection Week" for the second consecutive year.

While the State Health Department was not a co-sponsor participant in the program last year, the complete cost for underwriting this year's project was borne by the state agency. The financing was made possible by the State Health Department's receipt of an approximate \$160,000.00 immunization education grant last Fall.

"Health Protection Week," a statewide immunization education campaign, was con-

ducted April 12th through 18th, 1964.

The purpose for the immunization education project was to improve the level of immunization in Oklahoma for tetanus, whooping cough, diphtheria, smallpox and poliomyelitis. The theme used in promoting the public information program focused attention on the family physician and emphasized the need for Oklahomans to see him about bringing vaccinations up to date.

Waiting room posters were mailed to each physician in the state for their use during the event.

The OSMA and State Health Department distributed prepared slides and supporting announcements to all Oklahoma television stations. State radio stations were supplied with prepared spot announcements for their continuous use during the project week.

Newspapers, moreover, were furnished with prepared editorials or background information, and news releases for continuous use during the weeklong activity.

Recommendations: Regarding immunization education, the Council requests House of Delegates authority to conduct "Health Protection Week" again next Spring, if deemed advisable in view of the State Health Department's plans to spend an approximate \$160,000.00 in this subject area under conditions of the two-year grant. The Council will maintain liaison with public health officials regarding immunization education projects to be financed with the tax funds.

B. *Cornell Automotive Crash Injury Research Study*: At the request of the Council, the Board of Trustees on July 14, 1963, endorsed OSMA participation in the Cornell Automotive Crash Injury Research Study—a two-year research project designed to obtain reliable data on the frequency, nature, and specific causes of injury to occupants of passenger cars and trucks involved in accidents. Medical data submitted by physicians treating accident victims is matched with information on injury causes and accident data supplied by state patrol officers and is

submitted to Cornell University for analysis and statistical tabulation. Cornell's research findings are transmitted to automobile manufacturers in the form of recommendations for improvement in safety design and engineering features.

Since January 1st, 1964, active case research studies have been underway in Highway Patrol districts 4 and 7 and will continue through June 30th. The study will then concentrate on two other patrol districts and follow the same six-month study pattern until all ten Oklahoma Highway Patrol districts have been involved in the study.

Others participating in the crash study include the Oklahoma State Health Department, Oklahoma State Highway Patrol and Oklahoma Hospital Association.

Recommendation: The Council urges continued participation in the two-year study which began January 1, 1964.

SECTION II

Disaster Medical Care Committee: Two years ago, the OSMA assumed leadership in inaugurating the Medical Self-Help Training Courses. These courses have been carried out very successfully this year throughout the entire state.

Under the supervision and guidance of Oklahoma Civil Defense, the State Health Department, this committee, and with the approval of the local county medical society, these courses were taught. To date, 3,365 students have completed the Self-Help Training Course in Oklahoma.

In the area of Hospital Disaster Planning, the Council on Public Health approved the selection of Stillwater as a site location for an additional 200-bed emergency hospital. The total number of pre-positioned civil defense emergency hospitals in Oklahoma is 18—with eight more sites approved for same.

Recommendation: That the OSMA continue its participation in Disaster Medical Care activities.

SECTION III

Rehabilitation Committee: The committee is happy to report that the Vocational Rehabilitation Division of the State Department of Education is working very well with physicians across the state.

During the year, the Vocational Rehabilitation Division has hired a full-time medical consultant; area advisors working under the Department have been selected and an evaluation team was created, whose job it is to go into communities and evaluate prospective patients and individuals in need of rehabilitation guidance.

The committee feels the rehabilitation first line of defense remains the private physician in the community who evaluates the patient from the standpoint of his medical or surgical needs.

SECTION IV

Perinatal Mortality Committee: The objective of the Perinatal Mortality Committee is the same as the objective of the Committee on Maternal and Child Care of the American Medical Association as stated in the AMA's "Guide for the Study of Perinatal Mortality and Morbidity," Revised Edition, 1962:

"The objective of the perinatal mortality and morbidity studies is to improve the reproduction of normal human beings. The elimination of deaths and damage during the process of reproduction is the ideal for which we should strive. In working toward the objective with this ideal in mind, all individuals and committees should rigidly and courteously adhere to scientific and ethical principles."

This committee has met once during the year. It was decided that one of the best means to arouse interest in and encourage the study of perinatal mortality and morbidity would be to present, upon request before county medical society meetings and hospital staff meetings, demonstration Perinatal Mortality Conferences; the personnel to present these conferences to be made up of members of the committee and of physicians from the faculty of the interested departments in the Medical school. These arrangements were made in cooperation with the Office of Post-Graduate Education of the University of Oklahoma School of Medicine.

Notice of the availability of these demonstration conferences was published in the *Journal* of the Oklahoma State Medical Association and requests were received from Chickasha, McAlester and Clinton.

These programs were well received. The demonstration team was made up of obste-

tricians, pediatricians, a pathologist and a moderator—usually an obstetrician or general practitioner in the community where the program was presented.

The committee is anxious to extend the work of these demonstration teams and make it available to all areas of the state.

SECTION V

Maternal Mortality Committee: The objective of this committee and of its studies is to improve the practice of obstetrics in the state in order to eliminate, insofar as possible, deaths and damage during the process of reproduction. The committee believes that its studies should be published regularly in the *Journal* of the Association, and that the State Association and the component county societies should encourage the dissemination of the results of the studies by lending support to programs featuring this information.

During the year 1963, the committee studied the case reports of 27 patients whose deaths were considered by the reporting physician to be connected with pregnancy or the childbearing state. Of these the committee ruled 25 were obstetrical deaths, 11 were avoidable and ten were not avoidable. In four the committee was unable to determine whether or not the death was avoidable. Of the avoidable deaths, the committee was of the opinion that the attending physician should be assessed with the responsibility in three cases, the patient in four cases, the hospital in one case and combinations of factors in two cases. No assessment could be made in one case.

A report of the cases studied during the past five years is being prepared. The committee intends to offer for publication on a regular basis, selected anonymous case reports. The committee meets every two months, or more often if necessary. A plan for rotation of members of the committee is to be studied.

A proposal that the attendants who report the cases be invited to attend the meeting of the committee at which their case is to be discussed is being considered. The enactment in the last Legislature of the recodification of the Public Health Laws making information used in maternal mortality studies exempt as evidence in lawsuits should encourage meetings of this type.

SECTION VI

Mental Health Committee: The committee is very proud of the successful OSMA Conference on Mental Health, held January 26, 1963, in Oklahoma City. The Conference drew over 100 physician participants.

The OSMA was well represented at the AMA's Tenth Annual Conference of State Mental Health Representatives, which met in Chicago February 14-15, 1964. George H. Guthrey, M.D., and Albert J. Glass, M.D., Director of the Oklahoma Department of Mental Health attended the Conference and reported the proceedings to the OSMA Committee on Mental Health.

The Mental Health Committee presents the following "New Action For Mental Health in Oklahoma" as its recommendation for established views on mental health by the OSMA:

"New Action For Mental Health in Oklahoma"

The Committee on Mental Health has studied the appended documents of the American Medical Association which include "A Manual on Alcoholism," "Program of the Council on Mental Health," "Summary of the Program of the Council on Mental Health," "Principles on Mental Health," and our own Conference on Mental Health Proceedings from the special meeting of January 26, 1964. On the basis of these materials, the Committee proposes that the Oklahoma State Medical Association endorse a vigorous program to improve the mental health of our State.

Such a program should include the following points:

Medical Participation and Control

Many of the recommendations hereafter recorded relate to the advisability of developing and establishing new and improved mental health programs, procedures, and facilities. Throughout it should be understood that the following principles prevail:

1. Maximal control at the local level;
2. Maximal supervision by physicians* of all clinical activities;
3. Maximal participation by the practicing physician in all recommended local programs;

*The term "physician" as used here and subsequently refers specifically to a doctor of medicine (M.D.)

4. Continuing close attention by state and local medical societies to these various problems and their solutions;
5. A mental health committee, with appropriate subcommittees dealing with specific problem areas, should be active in each medical society in the State of Oklahoma.

Children

1. The relationship of maternal illness and childbirth procedures to perinatal infant distress and damage is highly significant. These factors contribute to neurologic deficit, retardation, and other subsequent mental, emotional and social problems. This is an area where the physician can accomplish primary prevention; it deserves increased emphasis.

2. Existing well-baby and pediatric clinics offer an opportunity for early recognition of emotional as well as physical disturbances, with the possibility of instituting remedial and preventive measures.

3. The State Medical Association and its members should support the establishment of facilities for the emotionally disturbed child, such as day care centers, pre-natal and neo-natal centers, and school counselling and guidance centers, all adequately professionally staffed.

4. The vital role of the family doctor in the diagnosis and treatment of emotional disturbances in children must be emphasized.

5. The present foster home program of the State is inadequate for our present-day needs and should be reorganized.

6. Our present community and State hospital facilities are insufficient for the adequate outpatient or inpatient care of the emotionally disturbed adolescent and young child. Many of the emotional problems of the young child should be handled on either a day-care or outpatient basis, leaving the more severely disturbed children to be treated on a residential basis.

7. In collaboration with the school systems, attention and participation of the physicians should be focused on the "school drop-out" phenomenon and other school mental health problems. Special educational facilities are also needed to aid this group of children.

The Mentally Retarded

1. Mental retardation is often a symptom of a variety of other diseases, having in their etiology such factors as neurologic, biochemical, psychological, and socio-cultural deficiencies. At the present time our diagnostic, evaluation, treatment and habilitation facilities for both inpatients and outpatients are insufficient and inadequate.

2. There is a need for every practicing physician within the State of Oklahoma to accept responsibility for the mentally retarded individuals who come under his care, in terms of recognition, evaluation and assistance in planning for their future.

3. With the opening of the Hissom Memorial Center, our ability to provide adequate treatment, educational and habilitation facilities for the retarded will be greatly improved. However, we still urgently need diagnostic and evaluative centers; we must develop more classrooms for the retarded and more teachers with training in special education; we must provide better care for the individual who is both retarded and emotionally disturbed.

Juvenile Delinquency

The physician can often detect early maladjustment problems during childhood and adolescence. A program should be established whereby physicians cooperate with schools and Juvenile Courts in diagnosis and treatment of the delinquent and the potential delinquent. This program should include not only the therapy and rehabilitation of the adolescence in trouble, but also should work toward the development of educational and recreational facilities to aid in the prevention of the problem.

The Family

The role of the family in the life of the mentally ill person is important. To help the family better to understand mental illness in one of its members, the physician should work with the family and also with various ancillary groups such as social workers, psychologists, community health nurses, and family and marriage counsellors.

The Aged

1. Physiological, emotional and socio-cultural problems combine to create special

psychiatric disturbances in certain elderly people. New concepts, drugs, and treatment techniques now offer improved diagnostic approaches to these problems. Every effort should be made to see that these new developments are integrated into existing patient care programs as rapidly as possible, in order that our senior citizens may receive the benefits of proper treatment while remaining in their own communities.

2. Nursing homes are playing an increasingly important role in the care and treatment of elderly patients. The medical profession should take more responsibility for improving the quality of care rendered by these institutions.

Alcoholism

The Association should:

1. Recognize alcoholism as a medical problem and the chronic alcoholic as a sick person;

2. Endorse the existing AMA statement on diagnosis and treatment of alcoholism, as printed in its Manual on Alcoholism, 1962 (pages 80-81), which reads:

(1) Alcoholic symptomatology and complications which occur in many personality disorders come within the scope of medical practice.

(2) Acute alcoholic intoxication can be and often is a medical emergency. As with any other acute case, the merits of each individual case should be considered at the time of the emergency.

(3) The type of alcoholic patient admitted to a general hospital should be judged on his individual merits, consideration being given to the attending physician's opinion, cooperation of the patient, and his behavior at the time of admission. The admitting doctors should then examine the patient and determine from the history and his actions whether he should be admitted or refused.

(4) In order to offer house officers well-rounded training in the general hospital, there should be adequate facilities available as part of a hospital program for care of alcoholics. Since the house officer in a hospital will eventually come in contact with this type of patient in practice,

his training in treating this illness should come while he is a resident officer. Hospital staffs should be urged to accept these patients for treatment and cooperate in this program.

(5) With improved means of treatment available and the changed viewpoint and attitude which places the alcoholic in the category of a sick individual, most of the problems formerly encountered in the treatment of the alcoholic in a general hospital have been greatly reduced. In any event, the individual patient should be evaluated rather than have general objection on the grounds of a diagnosis of alcoholism.

It is recognized that no general policy can be made for all hospitals. Administrators are urged to give careful consideration to the possibility of accepting such patients in the light of the newer available measures and the need for providing facilities for treating these patients. In order to render a service to the community, provision should be made for such patients who cooperate and who wish such care.

In order to accomplish any degree of success with the problem of alcoholism, it is necessary that educational programs be enlarged, methods of case findings and follow-up be ascertained, research be encouraged, and general education toward acceptance of these sick people be emphasized. The hospital and its administration occupy a unique position in the community which allows them great opportunities to contribute to the accomplishment of this purpose. It is urged that general hospitals and their administrators and staffs give thought to meeting this responsibility.

3. Issue a statement recommending discontinuation of the existing legal ineligibility of alcoholics for admission to our State institutions.

4. Instruct an appropriate committee to consider and make prompt recommendations regarding topics to include the following:

- A. Special education programs on alcoholism for physicians and other health personnel;
- B. Insurance coverage for medical treatment of alcoholism and its complications.

Narcotic Addiction

1. Narcotic addiction, a complex problem involving medical, pharmacological, psychiatric, and socio-cultural factors, requires special treatment including psychiatric care and rehabilitation.

2. The law should allow addicts the same parole opportunities as other offenders. Hospital treatment for the withdrawal and rehabilitation of these patients should be provided.

Sociopaths, Sex Psychopaths and Other Psychiatrically Deviated Offenders

It should be recognized that, even though imprisoned, the psychiatrically deviated offender needs appropriate treatment. This should be made available, not only for humanitarian reasons, but because the subsequent danger to society by such offenders can thereby be reduced.

Legal Problems

1. The Oklahoma State Medical Association should collaborate with the Oklahoma Bar Association to develop laws more realistically attuned to the needs and rights of the mentally ill.

2. Attention should be given to fostering voluntary commitments.

3. Pending court hearings, provision should be made for the temporary safekeeping of mentally ill patients in a suitable facility; jail is *not* considered a suitable place for retention of these persons. Necessary changes are required in commitment laws in order to provide for a more expeditious processing of commitment procedures.

4. The present laws should be modified to permit the release by mental hospitals of appropriate information concerning a former patient to those agencies and individuals properly involved in the patient's after-care.

Hospital Programs

1. It is recommended that henceforth approximately 15 per cent of new general hospital beds be designed so that they would be suitable for psychiatric patients as well as for general use. Given careful design, no elaborate security measures will be needed, and available data indicates that these beds will receive ample use in the local short-term

care of the emotionally disturbed patient (with or without physical disease) in or near his own community.

2. Existing general hospitals throughout the State should make some provisions for the reception and treatment of the acutely ill psychiatric patient.

3. Comprehensive acute psychiatric treatment centers should be established in the more heavily populated areas of the state. These would provide emergency and walk-in service of all types of psychiatric cases, and intensive outpatient and inpatient treatment and care.

4. The establishment of rapid treatment centers would enable our large mental hospitals to operate more efficiently. This would result in the consolidation and improved treatment of the mentally ill at the community level, with a resultant decrease of admissions to state mental hospitals. Thus, state mental hospitals would be freed to improve and elaborate programs for the more severe mental disorders which require prolonged treatment and rehabilitation.

Rehabilitation and After-Care

The object of all mental health treatment programs is to enable the individual to function as independently and effectively as possible. Physical, mental and social rehabilitation are essential to this end. While hospitalized, the mentally ill should be given an opportunity, through vocational counseling and other training, to prepare themselves for the problems of everyday life after leaving the hospital. If this goal is to be reached, adequate programs of after-care must be provided for the released patient. This after-care program may include continuation of medical treatment, medical follow-up, supportive psychotherapy, continued vocational counselling, further rehabilitation or retraining procedures as an outpatient. The family physician should be involved in this program of after-care. A local doctor of the patient's choice, working in close collaboration with the mental facility from which the patient comes, is in an ideal position to render effective after-care. The transition from hospital to community will be improved by special establishments, such as day-care centers, night hospitals, and half-way houses.

Education of the Physician in Mental Health

1. The education of the physician in mental health should begin during the period of pre-medical and undergraduate education, which should include the behavioral sciences. The medical curriculum should give adequate emphasis to basic psychiatric principles and to the implications of interpersonal relationships in diagnostic and therapeutic procedures. Medical students should have clerkships providing experience with both inpatient and outpatient psychiatric patients of all ages.

2. Special courses in psychiatry should be developed for interns and residents training for work in fields other than psychiatry.

3. Continuing professional education should be available for the practicing physician to improve his knowledge and skill in dealing with the psychiatric aspects of medical practice. The University Medical Center should offer short courses and workshops leading to improved understanding of the physician-patient relationship and the psychological aspects of disease. Such courses should also help the practicing physician to improve his skills in diagnosis and treatment of common psychiatric disorders, increasing the percentage of cases he can manage locally, and clarifying the indications for referral.

Education of the Public

Greater public understanding of and information about mental illness will diminish the tendency to reject the mentally ill and will increase interest in programs intended to aid them. It is recommended that a Speakers' Bureau be established, providing a constant source of professional people well-informed in various facets of mental health, to disseminate correct information to various civic and local groups. Mental health conferences and congresses for members of the medical profession, open to representatives of the various news media and, in certain situations, the public should be encouraged.

Personnel

1. The recruitment and retention of personnel properly trained in mental health disciplines is a national problem. Therefore it is difficult to attract competent outsiders to

our state. Oklahoma must provide its own training programs for all levels of professional and non-professional mental health personnel, and must also provide competitive salaries, a favorable working climate, and stable conditions of employment.

An amount approximately equal to five per cent of the mental health budget should be provided by the state each year for mental health training programs.

2. Educational programs should be planned to attract more high school and college students to the health professions in general. Included should be a substantial presentation of the many opportunities for careers in the mental health field.

Research

Advances in caring for the mentally ill and promoting mental health will depend on increased knowledge and understanding arrived at through research. Insight into mental health and illness has progressed rapidly in the last ten years but is still at an early developmental stage and must be fostered and expanded. An amount approximately equal to five per cent of the mental health budget should be provided by the state each year for mental health research programs. Once begun, these can often receive considerable additional financial support.

Financing

1. Improved facilities and increased operating funds are essential to overcome the many shortages and inadequacies existing in our present mental health program. Oklahoma provides less than half the money (per patient per day) for mental patient care in State institutions than is currently budgeted in states like California and Kansas. Additional monies are needed to implement and extend present existing care and treatment programs in State mental hospitals.

2. Community mental health programs including clinics for mentally ill children and adults, special training schools for the mentally retarded; rapid treatment centers for heavily populated areas, half-way houses, after-care programs, research undertakings, and many other activities have been effectively and rapidly developed in many states under a method of joint local and state financing. Such a matching method should be developed for Oklahoma.

COUNCIL ON PROFESSIONAL EDUCATION

Report to the House of Delegates

May 1, 1964

Council Members

R. R. Hannas, M.D., Chairman	Sentinel
E. E. Shircliff, M.D.	Oklahoma City
Roger Reid, M.D.	Ardmore
S. N. Stone, Jr., M.D.	Oklahoma City
H. E. Denyer, M.D.	Bartlesville
Donald L. Brawner, M.D.	Tulsa
Irwin H. Brown, M.D.	Oklahoma City
Orange M. Welborn, M.D.	Ada
Wendell L. Smith, M.D.	Tulsa
Cleve Beller, M.D.	Tulsa
B. C. Chatham, M.D.	Chickasha
John R. Taylor, M.D.	Kingfisher

Eight Regional Postgraduate Courses were held in Ada, Altus, Lawton, Bartlesville, Woodward, Durant, Enid and Miami. Subjects presented were the "Pancreas," "Small Intestine," "Heart," and "Central Nervous System." Total attendance this year was higher than for any previous year. Acceptance throughout the state would indicate that these courses should be continued.

Fourteen Educational Television shows have been sponsored. Some were borrowed from Utah and some were "homegrown." It

is difficult to determine the size of the audience for these programs, but this we are studying and again it appears that we have a worthwhile project.

Members of this Council have devoted considerable time and thought to the planning of the Scientific Sessions at our Annual Meeting, and we hope the membership will enjoy and approve the Scientific Renaissance.

Because of the complete cooperation of Irwin Brown, M.D., Director of the Postgraduate Office at the University of Oklahoma Medical School, our job is made much easier, and we again wish to thank him wholeheartedly.

The Scholarship and Loan Fund Committee will report separately.

Recommendations

1. That the Regional Postgraduate Courses be continued and that the sum of \$1,200.00 be allotted for use as needed in this regard.

2. That the Educational Television Courses be continued and that \$1,200.00 be allotted to defray these expenses.

ANNUAL MEETING TELEPHONE MESSAGE CENTER

While you are attending the Annual Meeting, your
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RESOLUTIONS

Introduced by: OSMA Editorial Board Resolution 1
Subject: Journal Advertising
Referred to: Reference Committee I

WHEREAS, the 56-year-old *Journal of the Oklahoma State Medical Association* provides nearly 2,000 physicians with a medium of exchange for scientific and other information; and

WHEREAS, for many members of the Oklahoma State Medical Association, the *Journal* is the only medical publication readily available for the written expression of ideas; and

WHEREAS, the *Journal* has been honored on two occasions in recent years for its editorial and typographical excellence; and

WHEREAS, the continued life of the *Journal* is now being threatened by a steady decline in pharmaceutical advertising, reported to be the result of a shift by major manufacturers to the support of certain commercial publications; and

WHEREAS, the imminent demise of the *Journal of the Oklahoma State Medical Association* will not only destroy the free exchange of scientific and organizational information of vital interest to the medical profession in Oklahoma, but will also seriously affect the efficiency of the association in achieving its objectives, most of which are objectives commonly shared with the pharmaceutical industry; and

WHEREAS, publications of other state medical associations are reported to be in similar financial circumstances;

NOW, THEREFORE BE IT RESOLVED, by the Editorial Board and the House of Delegates of the Oklahoma State Medical Association, that the excessive diversion of pharmaceutical advertising to commercial publications and the resultant financial insolvency of state medical association publications are to be deplored as contrary to the interests of medical science, medical organizations and the companion pharmaceutical industry; and

BE IT FURTHER RESOLVED, that manufacturers whose products are supported by the faith of practicing physicians should return the faith by immediately re-

storing support to the locally-controlled, valuable publications of organized medicine; and

BE IT FURTHER RESOLVED, that the House of Delegates shall require the Editorial Board of the *Journal of the Oklahoma State Medical Association* to annually report the names of the pharmaceutical manufacturers who support the publication of our non-profit Journal, as well as the individual amounts of such support; and

BE IT FURTHER RESOLVED, that major pharmaceutical manufacturers be supplied with copies of this resolution and be respectfully advised to reconsider advertising policies which might work against the continued life of a major, important medium of medical communications.

Introduced by: Canadian County Resolution 2
Medical Society
Subject: Statement of Principle, Indigent Medical Care
Programs
Referred to: Reference Committee III

WHEREAS, the members of the Canadian County Medical Society believe that the trend of the Federal Government toward socialism is increasing, as evidenced, among other things, by the program promulgated by the Department of Health, Education and Welfare and the Kerr-Mills law with respect to socialized medicine and medical care; and

WHEREAS, the efforts to reverse this trend by the formation of organizations to educate the American taxpayers of the cost to them and the dangers thereof have been inadequate and ineffective, and this society believes it is necessary that the members of the medical profession take positive action to combat said socialistic trend, and to preserve our free enterprise economy and to protect and perpetuate the confidential doctor-patient relationship;

NOW, THEREFORE BE IT RESOLVED BY THE CANADIAN COUNTY MEDICAL SOCIETY OF CANADIAN COUNTY, OKLAHOMA, that from and after the approval of this Resolution by the House of Delegates of the Oklahoma State Medical Association, no member of the Oklahoma

State Medical Association will file any claim with, or directly or indirectly accept any tax money from state or federally supported indigent medical care programs for medical services rendered to any person now or hereafter eligible thereunder, whether by virtue of existing laws or any other law or laws hereafter enacted.

BE IT FURTHER RESOLVED, that the members of this association shall always under the oaths, ethics or principles of the medical profession render services to the indigent free of charge.

Introduced by: Choctaw-Pushmataha
County Medical Society Resolution 3
Subject: General Practice Teaching Program
Referred to: Reference Committee I

WHEREAS, practicing physicians are necessarily concerned with the instruction and education of doctors of the state; and

WHEREAS, the responsibility for the maintenance of the best professional relationship between academic and practicing physicians is recognized;

THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association recommends the appointment of a general practitioner as a part-time instructor for the first-year medical school students on a rotating basis.

BE IT FURTHER RESOLVED, that a committee of general practitioners be selected by the Dean of the medical school, after counsel with the President of the Oklahoma State Medical Association, the President of the Oklahoma Academy of General Practice, and the State Commissioner of Health, to implement this teaching program.

BE IT FURTHER RESOLVED, that for continuity of teaching in this program, other committee members be selected at the discretion of the Dean of the medical school.

Introduced by: Tulsa County
Medical Society Resolution 4
Subject: Dual Memberships in County Medical Societies
Referred to: Reference Committee I

WHEREAS, the Constitution and Bylaws of the Oklahoma State Medical Association neither specifically permits nor prohibits a physician from holding membership in two

or more component county medical societies at the same time; and

WHEREAS, the existence of dual memberships has posed unresolved problems pertaining to administration, primary responsibilities and authorities, discipline and interpretation;

NOW, THEREFORE, BE IT RESOLVED, that the House of Delegates direct the Committee on Constitution and Bylaws to prepare and submit to the House at its next regular session an appropriate amendment or amendments which shall establish a specific policy and guidelines relative to dual memberships in component county societies.

Introduced by: Tulsa County
Medical Society Resolution 5
Subject: Immunization Education Program
Referred to: Reference Committee II

WHEREAS, the House of Delegates has previously adopted, for good and sufficient reason, resolutions instructing the Oklahoma State Medical Association to develop an effective program of public education concerning immunizations available against preventable disease, in cooperation with all other interested parties, specifically to the Oklahoma State Department of Public Health and the Pharmaceutical Industry; and

WHEREAS, the need for this program continues to be apparent despite widespread programs of public education;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association, through appropriate councils and committees, be instructed to continue and enlarge and intensify a continuing public education program throughout the year against preventable illness, and to initiate new and continuing programs in cooperation with any reputable agency or private concern offering assistance and cooperation.

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association sponsor appropriate legislation in the Oklahoma State Legislature, to provide funds for the administration of an adequate immunization education program.

BE IT FURTHER RESOLVED, that this program be developed and administered in keeping with the principle that immunization shall be the individual financial responsibility of the citizen and that arrangements

continue to be made available for the care of those without means.

Introduced by: Tulsa County
Medical Society **Resolution 6**
Subject: Immunization by Public Health Departments
Referred to: Reference Committee II

WHEREAS, the interpretation of the Attorney General of the State of Oklahoma, of the law setting up the Oklahoma State Department of Public Health, is that its services are available to all citizens regardless of ability to pay; and

WHEREAS, the Oklahoma State Department of Public Health in an appropriate function, sponsors clinics for immunizations against preventable illnesses, regardless of ability of recipients to pay; and

WHEREAS, it represents an avoidable expense to the taxpayers to pay for immunization of individuals with means where this is readily locally available through non-public sources;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association through appropriate executive action, requests the Oklahoma State Department of Public Health to avoid duplication of facilities for immunizations, when the local ability to provide this service is available.

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association through appropriate council or committee, sponsor legislation in the Oklahoma State Legislature, directing the Oklahoma State Department of Public Health to provide immunizations to the qualified needy only and to withhold immunizations for those able to pay for such services.

Introduced by: Council on
Public Health **Resolution 7**
Subject: Endorsement of AMA Mental Health Program
Referred to: Reference Committee IV

WHEREAS, the American Medical Association has officially recognized mental illness as "a major health problem facing the nation today," further stating that "the medical profession has a clear responsibility to assume leadership in the mental health field and to work with professional and lay groups in a sustained, coordinated effort to effect sound, workable mental health programs"; and

WHEREAS, the American Medical Association has further stated that it "recognizes the important stake every physician, regardless of type of practice, has in improving our mental health knowledge and resources"; and

WHEREAS, the policies, objectives and recommendations of the American Medical Association concerning mental health are available in official document,¹ which have been studied by the Oklahoma State Medical Association's Committee on Mental Health; and

WHEREAS, on January 26, 1964, the Oklahoma State Medical Association sponsored a special Conference on Mental Health, which provided additional details concerning the application of these policies and objectives to the mental health problems of Oklahoma;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association endorses the principles and policies concerning mental health as officially put forward by the American Medical Association in the above mentioned documents.¹

1. AMA Statement of Principles on Mental Health; Program of the Council on Mental Health; Summary of the Program of the Council of Mental Health.

Introduced by: J. L. Richardson, M.D.
Secretary, Oklahoma **Resolution 8**
Orthopedic Society
Subject: Better Care For Crippled Children
Referred to: Reference Committee II

WHEREAS, due to lack of adequate hospital facilities and services in certain areas of the state, orthopedic care of Crippled Children's cases is not always of the highest attainable quality; and

WHEREAS, training hospitals approved by the national accrediting agency of the American College of Surgeons are well-equipped for such specialized care; and

WHEREAS, the Oklahoma Orthopedic Society has seriously considered problems associated with the Crippled Children's program in Oklahoma, and unanimously supports the content of this resolution;

NOW, THEREFORE, BE IT RESOLVED, that all elective and reconstructive surgery for Crippled Children's cases be performed at the University of Oklahoma Medical Center.

Introduced by: J. L. Richardson, M.D.
Secretary, Oklahoma Resolution 9
Orthopedic Society
Subject: Fee For Service, Crippled Children's Program
Referred to: Reference Committee II

WHEREAS, patients formerly cared for under the Crippled Children's Commission are now under the authority of the Department of Public Welfare; and

WHEREAS, such patients are being treated administratively in essentially the same fashion as adults, and the existing age limitation is meaningless;

NOW, THEREFORE, BE IT RESOLVED, that children in this classification should be treated the same as adults in regard to fee for service.

Introduced by: Canadian County
Medical Society Resolution 10
Subject: Implementation of Resolution 68 Passed by
the AMA House of Delegates, June 19, 1963
Referred to: Reference Committee I

WHEREAS, the Canadian County Medical Society, on March 9, 1964, discussed the above mentioned resolution pertaining to the "importance of the general practitioner as an essential component of American medicine"; and

WHEREAS, once again recognition was taken of the need for "an adequate number of medical school graduates selecting general practice for their medical careers"; and

WHEREAS, the AMA House did resolve to "instruct its Board of Trustees to utilize all facilities at its command to:

"A. Inform the medical schools of the shortage of general practitioners, and request their cooperation in exposing medical students to general practice by lectures, preceptor programs, and clinical instructors who are practicing general practitioners; and

"B. Inform the constituent state medical associations of the need to emphasize general practice training and to ask these associations' members to encourage students to go into general practice."

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association House of Delegates likewise take cognizance of this problem and instruct our Board of Trustees to utilize all facilities at its com-

mand to implement immediately the intent of Resolution 68 passed by the AMA House of Delegates.

Introduced by: OSMA Resolutions
Committee Resolution 11
Subject: Federal Mental Health Legislation
Referred to: Reference Committee IV

WHEREAS, the mental health bill as passed by the United States Congress in 1963 opens the door for complete socialization of medicine, as well as the complete socialization of our economy;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association go on record as supporting the stand as taken by the Legislative and Public Relations Committee, chaired by Robert C. Long, M.D., at the American Medical Association meeting June 18, 1963, which states as follows:

"Your reference committee unanimously disapproves of the concept of Federal funds for staffing mental health institutions. Indeed, your committee has serious misgivings concerning the propriety of approving the principle of 'bricks and mortar' for mental health centers. Therefore, your committee recommends that the policy of the American Medical Association with respect to 'bricks and mortar' be reviewed and re-evaluated by the Board with recommendations to be reported to the House at its next annual meeting."

Introduced by: OSMA Resolutions
Committee Resolution 12
Subject: Areawide Planning for Hospitals
Referred to: Reference Committee III

WHEREAS, the United States Public Health Service in collaboration with the American Hospital Association, has conducted a survey and issued a joint report on "Areawide Planning for Hospitals"; and

WHEREAS, this report, as well as burgeoning literature on the subject, presents the thesis that only the big voluntary non-profit of government hospitals can render complete or the best medical service; and

WHEREAS, these reports, referred to, further advanced the seductive argument that the building of private-for-profit hospitals may deprive a community of an "opportunity" to obtain government funds for a non-profit institution; and

WHEREAS, these reports encourage compulsory area-wide planning for hospitals and other health facilities to be implemented by legalized state agencies; and

WHEREAS, the President of Blue Cross, Mr. Walter J. McNerney, has been quoted as saying "any group which builds without reference to community planning jeopardizes the solvency of Blue Cross"; and

WHEREAS, in one area their Blue Cross tried to deny claims from a hospital which had expanded its plant without consulting its area planning board; and

WHEREAS, federal money is now being used for state-wide surveys for area-wide planning for health facilities in Minnesota, Kansas and Hawaii; and

WHEREAS, efforts are being made in various states to establish compulsory area-wide health facilities planning on a statutory basis; and

WHEREAS, S. 855 by Senator Hubert Humphrey, which passed the Senate last month without debate, affords federal recognition and commendation for all such planning boards and commissions and lays the ground work for ultimate complete control by such boards;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association, in regular session assembled, this 1st day of May, 1964, opposes compulsory area-wide planning for health facilities and calls on the House of Delegates of the Oklahoma State Medical Association to express this position to the American Medical Association.

AND, BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association be instructed to alert the governing boards of the hospitals of this state to the dangers inherent in such compulsory planning.

Introduced by: OSMA Resolutions
Committee

Resolution 13

Subject: Opposition to Amendment to Food, Drug and
Cosmetic Act Dealing With Proof of Efficacy

Referred to: Reference Committee II

WHEREAS, the Kefauver-Harris Act of 1962, amending the Federal Food, Drug and Cosmetic Act, gives the U.S. Food and Drug Administration for the first time the authority to evaluate the effectiveness of drugs; and

WHEREAS, only the medical profession, after widespread usage, can ultimately determine the true effectiveness of a drug; and

WHEREAS, authorizing a federal agency to deprive physicians of the use of drugs which they may wish to use in their practice is an unwarranted intrusion into the practice of medicine and an improper interference with the physicians' responsibilities, and prerogatives; and

WHEREAS, the American Medical Association strongly opposed this grant of authority to a federal agency when this legislation was pending before Congress; and

WHEREAS, this act can only operate to the detriment of the practice of medicine and the public health; and

WHEREAS, attempts are currently being made to include similar control mechanisms for all medical devices and implants;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association encourage the American Medical Association to attempt to have these provisions authorizing the determination of the effectiveness of drugs by the Food and Drug Administration removed from the Kefauver-Harris Amendment.

BE IT FURTHER RESOLVED, that every effort be made to prevent the enactment of similar federal regulatory legislation with regard to devices and implants.

BE IT FURTHER RESOLVED, that all constituent and component medical associations be urged to join in this effort by soliciting the support of their senators and representatives.

Introduced by: Pittsburg County
Medical Society

Resolution 14

Subject: Enactment of Lien and Family Responsibility
Laws

Referred to: Reference Committee II

WHEREAS, the Oklahoma State Medical Association has pledged the cooperation of its membership in giving medical service to the elderly people of our state who are recipients of Old Age Assistance and Medical Assistance for the Aged; and

WHEREAS, the administrator of these programs in the State of Oklahoma finds the funds available inadequate to finance them without making marked restrictions in the payment of these services; and

WHEREAS, the administrator of these programs has asked the Oklahoma State Medical Association for recommendations to aid him in the financing of these programs; and

WHEREAS, it has been definitely proven that in states which have property lien laws and family responsibility laws, the financial load for implementing these programs is greatly reduced;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association go on record as favoring this type of legislation in Oklahoma.

BE IT FURTHER RESOLVED, that a vigorous effort be made to get this type of legislation introduced into the next session of Legislature.

BE IT FURTHER RESOLVED, that a statewide organization be set up in the Oklahoma State Medical Association for the purpose of dissemination of information and aiding in the passage of this legislation.

Introduced by: Pottawatomie County
Medical Society Resolution 15
Subject: Amendment to Medical Practice Act
Referred to: Reference Committee II

WHEREAS, the members of the Board of Medical Examiners are appointed for a term of four years by the governor; and

WHEREAS, such appointments could overthrow completely the continuity of the Board of Medical Examiners;

NOW, THEREFORE, BE IT RESOLVED, by the Pottawatomie County Medical Society that the Board of Medical Examiners shall be appointed for a term of seven years, with the term of one member terminating each year.

BE IT FURTHER RESOLVED, that a member of the Board of Medical Examiners shall not be removed without cause.

Introduced by: Canadian County
Medical Society Resolution 16
Subject: Amendments to Medical Practice Act
Referred to: Reference Committee II

WHEREAS, we have learned of the temporary status of the Oklahoma State Board of Medical Examiners in which a complete change of the board may occur at the expiration of the appointments; and

WHEREAS, such change would result in a lack of experience in usual Board of Medical Examiners procedures and policies; and

WHEREAS, such a change would result in inexperienced although earnest operation of said board; and

WHEREAS, this board is the only body established by statute for the administration of the Medical Practice Act;

NOW, THEREFORE, BE IT RESOLVED, that the House of Delegates of the Oklahoma State Medical Association endorse the changes recommended in the Medical Practice Act as hereto appended.

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association urges the Legislature of the State of Oklahoma to amend the Medical Practice Act as incorporated in the Appendix to this resolution.

* * * * *

APPENDIX

This resolution, if passed, would provide continuity of experience on the Board without altering in any way its powers as granted by law. There are a few minor changes which would clarify terminology but which do not change practice or policy.

N.B. The *italicized* words and phrases encompass the suggested amendments to the appropriate sections of the Medical Practice Act.

59 O.S. 1961, Section 481 is hereby amended to read as follows:

Section 1. A State Board of Medical Examiners is hereby established in the State of Oklahoma to consist of seven (7) members who shall be citizens of the United States of America, graduates in medicine from Medical Colleges recognized by Oklahoma at the time of such graduation, and legal and active practitioners of medicine and surgery within the state for more than three (3) years prior to their appointment as members of said Board. *The official name of this Board shall be, State Board of Medical Examiners.*

59 O.S. 1961, Section 482 is hereby amended to read as follows:

Section 2. Immediately after the effective date of this Act, the members of the State Board of Medical Examiners shall be appointed by the Governor from a list of not less than fourteen (14) names submitted to the Governor by the Oklahoma State Medical Association; . . . provided that no member shall be a stockholder in or member of the faculty or Board of Trustees of any medical college or school. *The Governor shall appoint one (1) member to serve for one (1) year, one (1) member to serve two (2) years, one (1) member to serve three (3) years, one (1) member to serve four (4) years, one (1) member to serve five (5) years, one (1) member to serve six (6) years, one (1) member to serve seven (7) years. Their successors shall be appointed for a term of seven (7) years and such appointment shall be made by the Governor within ninety (90) days after the term of any member expires and shall be made from a list of three (3) names submitted to the Governor by the Oklahoma State Medical Association. Vacancies shall be filled by the*

Governor within ninety (90) days after any vacancy occurs and the person so appointed to fill the vacancy shall serve the unexpired term; such appointment shall be made from a list of three (3) names submitted to the Governor by the Oklahoma State Medical Association.

59 O.S. 1961, Section 483 is hereby amended to read as follows:

Section 3. *The State Board of Medical Examiners shall be the successors to the present State Board of Medical Examiners and shall assume all of the duties and responsibilities thereof.*

59 O.S. 1961, Section 485 is hereby amended to read as follows:

Section 5. The State Board of Medical Examiners shall, immediately after the members shall have qualified as such, organize by electing a president, a vice-president and a secretary-treasurer, and thereafter, at the next regular meeting of the Board, held in the first six months of each calendar year, all such offices shall become vacant and be filled by another election, except the secretary-treasurer, who shall serve at the pleasure of the State Board of Medical Examiners.

59 O.S. 1961, Section 493 is hereby amended to read as follows:

The State Board of Medical Examiners shall admit any applicant to the regular examination for licensure to practice medicine and surgery within the meaning of this Act, who makes application therefore verified by oath upon forms provided by said Board, and who shall accompany the application with the fee of Twenty-five (\$25.00) dollars; provided, that an applicant, to be eligible for examination, must present satisfactory evidence of identification; that he is of good moral character and is not addicted to habitual intemperance or the habitual use of habit-forming drugs; that he has not been convicted of a felony or a crime involving moral turpitude; that he has never been guilty of unprofessional conduct as hereinafter defined; that his medical license has never been revoked within any other state for cause, that he is not suffering with active *pulmonary* tuberculosis or a draining tubercular lesion or venereal disease, and that he is a citizen of the United States.

It is further provided that the applicant must; (a) submit satisfactory evidence that he is a graduate of a legally chartered medical college or university, the requirements of which for graduation shall have been, at the time of such graduation, in no particular less than those prescribed by the Association of American Medical Colleges or the Council on Medical Education and Hospitals of the American Medical Association for that particular year, or, (b) submit satisfactory evidence that he has passed such examinations as the Board may require to determine his educational qualifications to take the regular examinations for licensure to practice medicine and surgery.

It is further provided that the Board of Medical Examiners may, at such time as it deems expedient, require all applicants for licensure a properly verified certificate that they have served a one (1) year's internship in a general hospital which is approved and recognized by the said Board.

Introduced by: Alfalfa-Woods County
Medical Society Resolution 17
Subject: Practicing Teaching Faculty
Referred to: Reference Committee I

WHEREAS, there is a drastic need for more enlightenment of the medical students of the University of Oklahoma for a closer union between the student and practicing physician, and to acquaint him with the practical aspect of medicine;

NOW, THEREFORE, BE IT RESOLVED, that more practicing physicians be placed on the faculty of Oklahoma University School of Medicine.

Introduced by: Alfalfa-Woods County
Medical Society Resolution 18
Subject: Identity of Persons Who Have Previously
Sued Physicians in Oklahoma
Referred to: Reference Committee IV

WHEREAS, due to the increase in number of physicians of good standing being sued for professional liability;

NOW, THEREFORE, BE IT RESOLVED, that a list of names of the persons suing the physicians be published, privately, and sent to all physicians of good standing in the state of Oklahoma.

Introduced by: Joe L. Duer, M.D. Resolution 19
Subject: Board of Trustees Quorum
Referred to: Reference Committee I

WHEREAS, the activities of the association are assigned to, and carried out by voluntary efforts on the part of the elected and appointed officials of the association; and

WHEREAS, there are many important issues to be considered throughout each year; and

WHEREAS, quorums are often difficult to be had, especially at emergency called meetings;

NOW, THEREFORE, BE IT RESOLVED, that Chapter IV, Section 3.00, shall be amended by adding to and after the last sentence, the words "at which a majority of the trustees shall constitute a quorum; but at special and called meetings, fifteen (15) trustees shall constitute a quorum."

Introduced by: OSMA Resolutions
Committee Resolution 20
Subject: Clarification of Policies, Joint Commission on
Accreditation of Hospitals
Referred to: Reference Committee III

WHEREAS, there has been much misinformation and loose interpretation concern-

ing the requirements and standards of the Joint Commission on Accreditation of Hospitals;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association obtain a synopsis or abbreviated summary of said rules and regulations to distribute to each member of the association.

Introduced by: OSMA Resolutions
Committee Resolution 21
Subject: Socio-Economic Education, O.U. Medical School
Referred to: Reference Committee III

WHEREAS, it continues to be of great importance that medical students be informed in regard to the socio-economic and legal aspects of medicine; and

WHEREAS, there exists many practicing physicians competent and willing to offer their services to medical students for the accomplishment of this purpose;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma University School of Medicine be encouraged to offer instruction in the socio-economic aspects of medical practice to their students.

Introduced by: OSMA Resolutions
Committee Resolution 22
Subject: Essentials of An Approved Internship
Referred to: Reference Committee I

WHEREAS, the Council on Medical Education of the AMA is to submit a revised "Essentials of An Approved Internship" at the Annual Meeting in June, 1964; and

WHEREAS, many community hospitals which provide a good educational program for interns, but do not have a necessity for an organized outpatient clinic;

NOW, THEREFORE, BE IT RESOLVED, that our delegates to the AMA be instructed to oppose the incorporation of the requirement of an organized outpatient clinic as an essential to an approved internship.

Introduced by: Oklahoma County
Medical Society Resolution 23
Subject: Disability Evaluation For Compensation Purposes
Referred to: Reference Committee III

WHEREAS, the present method of evaluating disability and making disability compensation awards by the State Industrial Commission is unscientific, unfair, and highly questionable, morally; and

WHEREAS, in the awarding of claims there are certain dangers and fallacious practices; to-wit:

1. The expedient policy of simply "averaging" conflicting disability estimates by a physician for the defense and a physician for the plaintiff; thus not carrying out the intent of compensation laws.

2. Equating with equal weight the testimony in disability evaluations between unorthodox practitioners and orthodox specialists in various fields.

3. Assuming that all claimants with disability should be awarded disability on the grounds that they should be supported because of financial need without regard for the circumstances of causation, or medical knowledge and testimony;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association brings to the attention of its members the problems, inequities, and abuses in connection with awards now being made under the present system of the State Industrial Commission.

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association appoint a study committee to meet with members of the Legislature, members of various reputable insurance companies, and members of the Oklahoma Bar Association to explore the abuses of the present system and correct them when possible and recommend a better system in disability evaluations for compensation purposes.

Introduced by: The Oklahoma County
Medical Society Resolution 24
Subject: Service Contracts
Referred to: Reference Committee III

WHEREAS, the agreement by a third party to pay the medical bills (as distinguished from hospital bills) of its subscribers in full, constitutes contracting to furnish medical services; and

WHEREAS, non-physician parties cannot furnish medical services; and

WHEREAS, third parties should not be given the power to offer the services of physicians to anyone, (this power logically and ethically belonging only to the individual physician); and

WHEREAS, the service insurance contract can lead to control of physicians' fees

and services by the contracting insurance company, (regardless of whether or not a board of physicians is consulted on establishment of fee schedules); and

WHEREAS, the establishment of a no-fee-schedule service insurance plan is just as vicious as such a plan with a fee schedule; and

WHEREAS, the fee arrangements with patients should be entirely under the control of the patient and his physician;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association is opposed to the offering of service insurance contracts for physicians' fees to any groups or individuals, and calls for the discontinuance of such plans as they are now offered. (This is not to be interpreted as conflicting with present workmen's compensation insurance coverage.)

Introduced by: The Oklahoma County
Medical Society Resolution 25
Subject: Legislation For Treatment of Alcoholic Patients By State Hospitals and Institutions
Referred to: Reference Committee IV

WHEREAS, the present legislation dealing with the treatment of alcoholics in state institutions has proven inadequate; and

WHEREAS, legislation is desperately needed to correct this defect;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association bring to the attention of the Oklahoma State Legislature the existence of this problem and strongly urge that they consider this problem and pass corrective legislation, to-wit:

Action to amend by deletion certain description in the Mental Health Law (1953) amended 1955, and subsequent: O.S. Title 43-A, Section 3—Sub-section (C) to eliminate the phrase, lines 6 and 7, "and chronic alcoholism" (see explanation of proposal).

BE IT FURTHER RESOLVED, that the report adopted by the American Medical Association in Seattle, Washington, November, 1956, a copy of which is attached, be approved by the Oklahoma State Medical Association and the conclusions and recommendations therein contained be included in proposals presented to the Oklahoma State Legislature for study and consideration.

* * * * *

EXPLANATION OF LEGISLATIVE PROPOSAL:

Purposes reflected in this proposed action is to take recognition of both medical and legal acceptance by

definition that alcoholism is properly classed as a disease, an illness, that in general it is treatable; that a problem exists in the community, the State of Oklahoma; that some means, method and procedure be permitted, established, and function instituted to cope with such problem; that presently established state institutions may be employed, in part, in such efforts to cope with this problem through recognized administrative function of heads of both the Department of Health and the Department of Mental Health in incorporating as a part of their general programs and procedures the treatment of patients suffering from alcoholism solely or in part; that such elimination of discrimination in basic definition respecting admission will then permit a beginning at least in coping with this health problem in the state, and without requiring special budgeting, appropriation, facility or enactment therefore to do so.

* * * * *

AMA REPORT OF REFERENCE COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

Doctor William A. Hyland, Chairman, Michigan, presented the following report, which was adopted:

Report of the Board of Trustees Dealing with Hospitalization of Patients with Alcoholism: Specifically, this section refers to a consideration by the Council on Mental Health and its Committee on Alcoholism of the problem of the hospitalization of patients with the diagnosis of alcoholism. Your committee urges the adoption of the following statement of the Council on Mental Health, which is quoted from the report of the Board of Trustees:

1. Alcoholic symptomatology and complications which occur in many personality disorders come within the scope of medical practice.

2. Acute alcoholic intoxication can be and often is a medical emergency, as with any other acute case, the merits of each individual case should be considered at the time of the emergency.

3. The type of alcoholic patient admitted to a general hospital should be judged on his individual merits, consideration being given to the attending physician's opinion, cooperation of the patient, and his behavior at the time of admission. The admitting doctors should then examine the patient and determine from the history and his actions whether he should be admitted or refused.

4. In order to offer house officers well-rounded training in the general hospital, there should be adequate facilities available as part of a hospital program for care of alcoholics. Since the house officer in a hospital will eventually come in contact with this type of patient in practice, his training in treating this illness should come while he is a resident officer. Hospital staffs should be urged to accept these patients for treatment and cooperate in this program.

5. With improved means of treatment available and the changed viewpoint and attitude which places the alcoholic in the category of a sick individual, most of the problems formerly encountered in the treatment of the alcoholic in a general hospital have been greatly reduced. In any event, the individual patient should be evaluated rather than have general objection on the grounds of a diagnosis of alcoholism.

It is recognized that no general policy can be made for all hospitals. Administrators are urged to give careful consideration to the possibility of accepting such patients in the light of the newer available measures and the need for providing facilities for treating these patients. In order to render a service to the community, provision should be made for such patients who cooperate and who wish such care.

In order to accomplish any degree of success with the problem of alcoholism, it is necessary that educational programs be enlarged, methods of case findings and follow-up be ascertained, be encouraged, and general education toward acceptance of these sick people be emphasized. The hospital and its administration occupy a unique position in the community which allows them great opportunities to contribute to the accomplishment of this purpose. It is urged that general hospitals and their administrators and staffs give thought to meeting this responsibility.

Your reference committee recommends that this action be brought to the attention of the Council on Medical Education and Hospitals from the standpoint of implementing educational approaches to the problem of alcoholism and that it also be referred to the Joint Commission on Accreditation of Hospitals and to the American Hospital Association in an effort to obtain more interest on the part of hospital administrators and their staff toward meeting this ever-increasing responsibility.

**Introduced by: The Oklahoma County
Medical Society Resolution 26**
**Subject: Support of Medically-Approved Family Plan-
ning Services in Oklahoma**
Referred to: Reference Committee IV

WHEREAS, the members of the medical profession and increasingly greater numbers of the general public now recognize the seriousness of the problem of the population explosion at home and abroad; and

WHEREAS, the unlimited increase of population will certainly lower the living standards of all unless medically-approved family planning methods are made available to low income parents who now have and continue to have more children than they desire; and

WHEREAS, the gap between children wanted and children born can only be closed by charitable institutions and by public health and welfare agencies making effective family planning techniques available to low income Americans and Oklahomans; and

WHEREAS, the Planned Parenthood Association chapters in Oklahoma are recognized charitable institutions devoted to operating clinics under medical supervision and making family planning techniques available to low income families by offering a free choice of techniques, one or more of

which is acceptable to all faiths; and

WHEREAS, with the support of local physicians and county medical societies it will be possible to encourage the inclusion of family planning services in the County Welfare Clinics and other charitable medical facilities in the cities and towns of the State of Oklahoma;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association supports the objective of making medically-approved family planning methods available to low income families in the State of Oklahoma by urging its individual members and the county medical societies in this state to:

(1) Support the Planned Parenthood Association in the cities and towns of Oklahoma where it has clinics and is seeking to extend its services;

(2) Encourage the inclusion of family planning services by offering a free choice of techniques, one or more of which is acceptable to all religious faiths in the County Welfare Clinics and other charitable medical facilities throughout the State of Oklahoma.

BE IT FURTHER RESOLVED, that notice of the foregoing resolution shall be distributed to each county medical society in the State of Oklahoma.

**Introduced by: The Oklahoma County
Medical Society Resolution 27**
Subject: Cigarette Smoking, A Health Hazard
Referred to: Reference Committee IV

WHEREAS, on the basis of a prolonged study and evaluation of many lines of converging evidence, the Surgeon General's advisory committee made the judgment that: CIGARETTE SMOKING IS CURRENTLY A HEALTH HAZARD OF SUFFICIENT IMPORTANCE TO WARRANT APPROPRIATE REMEDIAL ACTION; and

WHEREAS, the Oklahoma County Medical Society is concerned in all matters related to health;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association go on record as accepting the principal findings and conclusions of the report of the Surgeon General's Advisory Committee On SMOKING and HEALTH.

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association encourage and support education programs relative to this current potential health hazard.

WOMAN'S AUXILIARY

to the
OKLAHOMA STATE MEDICAL ASSOCIATION

ANNUAL CONVENTION

APRIL 30 - MAY 1, 2, 1964

HUCKINS HOTEL, OKLAHOMA CITY, OKLAHOMA

MRS. VIRGIL RAY FORESTER
Convention Chairman

MRS. HARRELL C. DODSON, JR.
Co-Chairman

STATE OFFICERS



MRS. TOM C. SPARKS
Ardmore
President



MRS. J. F. YORK
Madill
President-Elect



MRS. RICHARD E. WITT
Muskogee
1st Vice-President



MRS. ROBERT M. STOVER
Claremore
2nd Vice-President



MRS. JOE M. PARKER
Oklahoma City
Secretary



MRS. F. H. MCGREGOR
Oklahoma City
Treasurer



MRS. EARL M. BRICKER, Jr.
Oklahoma City
Treasurer-Elect

HONORED GUESTS



MRS. WILLIAM H. EVANS
Youngstown, Ohio
President-Elect
Woman's Auxiliary
American Medical Association



MRS. PAUL GRAY
Batesville, Arkansas
President
Woman's Auxiliary
Southern Medical Association



MRS. VIRGIL RAY FORESTER
Oklahoma City, Oklahoma
Director
Woman's Auxiliary
American Medical Association

GENERAL INFORMATION

REGISTRATION—Mezzanine, Huckins Hotel

Thursday, April 30_____3:00 p.m.-6:00 p.m.
Friday, May 1_____9:00 a.m.—5:00 p.m.
Saturday, May 2_____9:00 a.m.-1:00 p.m.

HOSPITALITY ROOM—Mezzanine, Huckins Hotel

The Hospitality Room will be open during registration hours Thursday, Friday and Saturday for the convenience of members and guests. Refreshments will be served courtesy Oklahoma Blue Cross-Blue Shield.

TICKETS—Mezzanine, Huckins Hotel

Tickets for the luncheons will be sold at the Registration desk.

DOCTORS' HOBBY SHOW—Mezzanine, Skirvin Hotel

CHAIRMAN: Mrs. Charles E. Smith, Jr.

Hobbies of Oklahoma Physicians and their wives are presented in this interesting exhibit and will be on display during the convention.

DOCTORS' DAY EXHIBITS—Mezzanine, Skirvin Hotel

CHAIRMAN: Mrs. Robert E. Dillman, Tulsa

MEDICAL ADVISORS:

Clifford M. Bassett, M.D., Cushing
Milton L. Berg, M.D., Tulsa
J. Hoyle Carlock, M.D., Ardmore

CONVENTION COMMITTEE

CHAIRMAN: Mrs. Virgil Ray Forester
CO-CHAIRMAN: Mrs. Harrell C. Dodson, Jr.
ASSISTANTS: Mrs. A. Jay Sands and Mrs. Elias Margo

Registration.....	Mrs. Sam R. Musallam
Credentials.....	Mrs. Sanford Matthews
	Mrs. Ralph A. Smith
Hospitality and Courtesy.....	Mrs. Robert A. McLaughlin
Luncheon.....	Mrs. Charles W. Freeman
Fashion Show.....	Mrs. Joseph W. Kelso
	Mrs. Walter K. Hartford
Tickets.....	Mrs. Ira O. Pollock
Publicity.....	Mrs. E. Cotter Murray
Art Director.....	Mrs. Henry C. Traska
Past-Presidents' Breakfast.....	Mrs. George H. Garrison
	Mrs. John Powers Wolff

PROGRAM

THURSDAY, APRIL 30, 1964

3:00-6:00 p.m.—REGISTRATION AND HOSPITALITY.
Mezzanine, Huckins Hotel. Hospitality Room,
courtesy Oklahoma Blue Cross-Blue Shield.

6:00 p.m.—RECEPTION FOR BOARD MEMBERS.
President's Suite, Room 835, Huckins Hotel.

7:00 p.m.—PRE-CONVENTION BOARD MEETING.
Dinner, Victorian Room, Mezzanine, Huckins
Hotel.

FRIDAY, MAY 1, 1964

8:00 a.m.—PAST-PRESIDENTS' BREAKFAST. Laurel Room, Mezzanine, Huckins Hotel. Hostesses: Mrs. George H. Garrison and Mrs. John Powers Wolff.

9:00 a.m.—REGISTRATION AND HOSPITALITY.
Mezzanine, Huckins Hotel. Hospitality Room
courtesy Oklahoma Blue Cross-Blue Shield.

10:00 a.m.—FIRST GENERAL SESSION. Colonial Hall, Mezzanine, Huckins Hotel. Mrs. Tom C. Sparks, Ardmore, President, presiding.

INVOCATION: Mrs. Iron H. Nelson, Tulsa.

PLEDGE OF LOYALTY: Mrs. Joe L. Duer, Woodward, Wife of the President, Oklahoma State Medical Association.

WELCOME: Mrs. Robert B. Howard, Oklahoma City, President, Woman's Auxiliary to the Oklahoma County Medical Society.

RESPONSE: Mrs. Clinton Gallaher, Shawnee.

GREETINGS: Harlan Thomas, M.D., Tulsa, President-Elect, Oklahoma State Medical Association.

INTRODUCTION OF SPECIAL GUESTS.

GUEST SPEAKER: Mrs. William H. Evans. Youngstown Ohio, President-Elect, Woman's Auxiliary, American Medical Association.

PRESENTATION OF PAST PRESIDENTS: Mrs. John Powers Wolff, Oklahoma City.

ANNOUNCEMENTS: Mrs. Virgil Ray Forester.
Oklahoma City, Convention Chairman.

ROLL CALL BY COUNTIES: Mrs. F. H. McGregor, Oklahoma City, Treasurer.

REPORT OF CREDENTIALS COMMITTEE:
Mrs. N. Sanford Matthews, Oklahoma City.

READING AND ADOPTION OF MINUTES: Mrs. Joe M. Parker, Oklahoma City, Secretary.

TREASURER'S REPORT: Mrs. F. H. McGregor. Oklahoma City, Treasurer, and Mrs. Earl M.

Bricker, Jr., Oklahoma City. Treasurer-Elect.

REPORTS OF OFFICERS:

First Vice-President—Mrs. Richard E. Witt.
Muskogee.

Second Vice-President—Mrs. Robert M. Stover,
Claremore.

Corresponding Secretary—Mrs. C. L. Lorentzen.
Ardmore.

Parliamentarian—Mrs. Milton L. Berg, Tulsa.
Historian—Mrs. Worth M. Gross, Tulsa.

Editor, "The Sooner Physician's Wife"—Mrs.
William R. R. Loney, Sr., Tulsa.

Editor, Auxiliary Page, *The Journal*, Oklahoma
State Medical Association—Mrs. J. J. Maril.
Oklahoma City.

REPORTS OF COMMITTEE CHAIRMEN:

American Medical Association Education and Research Foundation—Mrs. James B. Silman, Norman.
Bylaws—Mrs. Clifford M. Bassett, Cushing.
Civil Defense—Mrs. Neil W. Woodward, Oklahoma City.
Community Service—Mrs. Harold W. Houk, Ponca City.
Doctors' Day—Mrs. Robert E. Dillman, Tulsa.
Doctors' Hobbies—Mrs. Charles E. Smith, Jr., Oklahoma City.
Finance—Mrs. C. F. Foster, Jr., Oklahoma City.
Health Careers—Mrs. Port Johnson, Muskogee.
International Health Activities—Mrs. Ceylon S. Lewis, Jr., Tulsa.
Legislation—Mrs. Wilson J. Buvinger, Enid.
Loan Fund—Mrs. Iron H. Nelson, Tulsa.
Membership—Mrs. Richard E. Witt, Muskogee, and Mrs. Robert M. Stover, Claremore.
Mental Health—Mrs. J. H. White, Muskogee.
National Bulletin—Mrs. William M. Aldredge, Bartlesville.
Press and Publicity—Mrs. E. Cotter Murray, Oklahoma City.
Program—Mrs. Glen L. Berkenbile, Muskogee.
Rural Health—Mrs. Robert B. Zumwalt, Tecumseh.
Safety—Mrs. Richard G. Stoll, Chickasha.
Woman's Auxiliary, Student American Medical Association—Mrs. Jess E. Miller, Oklahoma City. Special Guest: Mrs. Joe Hartzog, President, WA, SAMA.
Handbook—Mrs. C. L. Oglesbee, Muskogee.
Hospitality—Mrs. A. Jay Sands, Oklahoma City, and Mrs. M. Joe Crosthwait, Oklahoma City.
REPORT OF NOMINATING COMMITTEE: Mrs. J. F. York, Madill, President-Elect.

ANNOUNCEMENTS.

MEMORIAL SERVICE: Mrs. C. F. Foster, Jr., Oklahoma City.

ADJOURNMENT.

12:30 p.m.—FASHION SHOW—LUNCHEON, "Port o' Call." Persian Room, Skirvin Tower, honoring Mrs. Tom C. Sparks, Ardmore, President, and Mrs. J. F. York, Madill, President-Elect.
Special Guests: Mrs. William H. Evans, President-Elect, Woman's Auxiliary, American Medical Association; Mrs. Paul Gray, President, Woman's Auxiliary, Southern Medical Association; and Mrs. Virgil Ray Forester, Director, Woman's Auxiliary, American Medical Association.
Fashions presented by Balliet's.

SATURDAY, MAY 2, 1964

9:00 a.m.—REGISTRATION AND HOSPITALITY. Mezzanine, Huckins Hotel. Hospitality Room courtesy Oklahoma Blue Cross-Blue Shield.
10:00 a.m.—SECOND GENERAL SESSION. Colonial Hall, Mezzanine, Huckins Hotel. Mrs. Tom C. Sparks, Ardmore, President, presiding.
INVOCATION: Mrs. Elias Margo, Oklahoma City.

PLEDGE OF LOYALTY: Mrs. Harlan Thomas, Tulsa, Wife of the President-Elect, Oklahoma State Medical Association.

WELCOME: Mrs. Ira O. Pollock, Oklahoma City, President-Elect, Woman's Auxiliary, Oklahoma County Medical Society.

RESPONSE: Mrs. Pat Fite, Sr., Muskogee.

GREETINGS: Joe L. Duer, M.D., Woodward, President, Oklahoma State Medical Association.

INTRODUCTION OF SPECIAL GUESTS.

GUEST SPEAKER: Mrs. Paul Gray, Batesville, Arkansas, President, Woman's Auxiliary, Southern Medical Association.

ROLL CALL BY COUNTIES: Mrs. F. H. McGregor, Oklahoma City, Treasurer.

REPORT OF CREDENTIALS COMMITTEE: Mrs. Ralph A. Smith, Oklahoma City.

REPORT OF COUNTY PRESIDENTS:

Atoka-Bryan-Coal Mrs. Alfred T. Baker
Carter-Love-Marshall Mrs. Thornton Kell
Cleveland-McClain Mrs. Francis E. Smith
Comanche-Cotton Mrs. Royce B. Means
Cookson Hills Mrs. Gordon W. Buffington
Craig-Delaware-Ottawa Mrs. Wylie G. Chesnut
Custer Mrs. R. Dayton Royse
East Central Mrs. Tony W. Pratt
Garfield-Kingfisher-Major
..... Mrs. Robert J. Terrill
Grady-Caddo Mrs. William S. Harrison
Kay-Noble Mrs. James A. Webb
Oklahoma Mrs. Robert B. Howard
Okmulgee Mrs. Arthur L. Buell
Pittsburg Mrs. William R. Murphy, Jr.
Pontotoc-Johnston Mrs. David C. Ramsay
Pottawatomie Mrs. Jake Jones
Stephens Mrs. Emmett H. Lindley
Tulsa Mrs. Robert L. Anderson
Washington-Nowata Mrs. Lynn C. Barnes, Jr.

OLD BUSINESS.

NEW BUSINESS.

ELECTION OF DELEGATES TO NATIONAL CONVENTION.

ELECTION OF OFFICERS.

INSTALLATION OF OFFICERS AND COUNCILORS—Mrs. William H. Evans, President-Elect, Woman's Auxiliary, American Medical Association.

PRESENTATION OF PAST-PRESIDENT'S EMBLEM: Mrs. Milton L. Berg, Tulsa.

PRESENTATION OF PRESIDENT'S PIN AND GAVEL: Mrs. Tom C. Sparks.

ANNOUNCEMENTS.

ADJOURNMENT OF 1963-1964 SESSION.

1:00 p.m.—POST-CONVENTION SCHOOL OF INSTRUCTION LUNCHEON. Crystal Hall, Mezzanine, Huckins Hotel, Mrs. J. F. York, Madill, President, presiding.

6:30 p.m.—SOCIAL HOUR, Persian Room, Skirvin Tower.

7:30-1:00 a.m.—PRESIDENT'S INAUGURAL DINNER-DANCE. Persian Room, Skirvin Tower.

BOOK REVIEWS

ANIMAL SPECIES AND EVOLUTION, by Ernst Mayr, Cambridge, Massachusetts, Harvard University Press, 1963, pp. 560, \$11.95.

THE ORIGIN OF RACES, by Carleton S. Coon, New York, Alfred A. Knopf, 1962, pp. 724, \$10.00.

Mayr's work is a monumental documentation of the revolution in taxonomy, taking place largely during the last 40 years, which has endowed the once rather bleak concept of the biological species with a new complexity and vitality. Earlier workers in taxonomy could only catalogue visibly different types from collected specimens, since this work had to come first. But more recent workers, studying populations in the field and in the genetic laboratory, have shown that reproductive isolation, the final criterion of the species, cannot be predicted by inspection of specimens. In addition, the relative nature of reproductive isolation—the finite rate of which it develops and the circumstances under which it may break down—can only be determined by study of specific cases. It is impossible to summarize in a short space the variety of the work which has been done, and which Mayr describes. Only a reading of *Animal Species and Evolution* in its entirety can convey the fluidity of the modern concept of the polytypic species, undergoing continuous internal gene flow until such time as it becomes genetically fragmented by the development of isolating mechanisms, sometimes increasing its variability by successful hybridization, and at the same time responding to the forces of natural selection in such a way as to suffer the usually irreversible progressive changes of evolution.

Coon's book, specifically concerned with the varieties of modern man and his ancestors, is in every sense contemporary with Mayr's. Starting with the observation which Franz Weidenreich once defended rather unaided against his colleagues, that the Asiatic "ape-man" *Sinanthropus* showed certain definite characteris-

tics which still distinguish the Asiatic races of man from others of the world, Coon develops the concept of modern man as a polytypic species which has developed from ancestry which itself was polytypic. This is a great change from the ideas generally entertained 30 years ago, when it was felt necessary to localize some particular part of the world which was the "cradle of man" and the home of some supposedly rather compact population from which all present humans must be exclusively descended. Unfortunately, in applying the more modern concept to a species in which development through time is of special interest, Coon becomes involved with the essentially insoluble palaeontological problem of what constitutes a species distinction in the time dimension; and has been led to postulate a threshold between *non-sapiens* and *sapiens* man which may have been crossed by different groups at different times. If so, we would have a paradoxical phenomenon of adjacent groups now of one species, now of different species, and now again of the same; a concept rather difficult to justify genetically. He appears also to be somewhat vague as to what extent evolutionary advancement in the various areas was due to independent mutation, and to what extent to parallel progress in selection for advantageous genes which were traded back and forth by peripheral gene flow. In view of the persistent infertility of the human races and the short length of time available (in geological perspective) for recent changes in the hominids, it appears to the present reviewer that gene interchange between the groups is the only adequate explanation, as well as the only one consistent with the concept of the polytypic species. Thus Coon's references to independent evolution of various races must be taken in an exceedingly relative sense.

This sketchy outline of some of Coon's conclusions should not obscure the fact that *The Origin of Races* is also a massive and detailed recounting of the ever-increasing ac-

cumulation of specimens, mostly fragmentary, of man's fossil ancestors, which have come to light in recent years. In honest scientific style he has not only presented his own interpretations, but surveyed the evidence so as to make it easier for others to reinterpret it. This is a difficult task which few could have done as well.—*Alice M. Brues, Ph.D.*

THE PANCREAS IN HUMAN AND EXPERIMENTAL DIABETES, by Sydney S. Lazarus and Bruno W. Volk, New York, Grune & Stratton, 1962, pp. 279, \$10.00.

This is an excellent book by two outstanding students of the pancreas in diabetes. They offer a remarkably extensive review of the world's literature in addition to presenting, in a clear, precise manner, work in fields of experimental diabetes, histochemistry and sulfonylureas. The illustrations are excellent and numerous and include four colored plates.

There are two appendices which consist of histologic methods and staining methods that the authors have found valuable and a chart showing dosage and mode of administration of chemical and hormonal diabetogenic agents.

The format is well arranged, and each of the twenty-two chapters covers its subject in a concise and succinct fashion which makes for fairly easy readings. As in any book of this type one may find an occasional inconsistency. For example, on page 147 it is stated that the change called "the ballooning degeneration" of beta cells has not been found in rabbits, while on page 87 there is an illustration showing this change. There is a large number of references which is one of the most outstanding features of the book, and a very complete index.

The last chapter presents an interesting historical background of the sulfonylureas, their modes of action and the histochemical changes in the pancreas. The authors suggest additional pharmacological effects of these drugs, perhaps on the liver or on the central nervous system which may account for the seemingly con-

trictory results obtained by different investigators.

This book is without exaggeration an invaluable addition to the literature on diabetes.—*C. Alton Brown, M.D.*

THE RED CELL: PRODUCTION, METABOLISM, DESTRUCTION: NORMAL AND ABNORMAL, by John W. Harris. Published for the Commonwealth Fund, Cambridge, Massachusetts, Harvard University Press, 1963, pp. 482, \$5.75.

This excellent monograph is a well-written, thoroughly-documented, account of current knowledge of the red cell in health and disease. Although this book was written as a text for the second year medical students in the author's clinical pathology course at Western Reserve, it is highly recommended for all physicians interested in the general field of internal medicine and particularly in hematology. Not the least attractive feature of this book is its reasonable price, \$5.75, which is a welcome bargain.—*Richard A. Marshall, M.D.*

THE SENILE BRAIN: A CLINICAL STUDY, by R. S. Allison, Baltimore, The Williams and Wilkins Company, 1962, pp. 288, \$10.00.

With old age enjoying an increasing popularity—at least insofar as it is expressed by the number of people "getting there," it holds no surprise that a number of studies in recent years should address themselves to aging of the nervous system. Doctor Allison, Senior Neurologist at the Royal Victoria Hospital in Belfast, offers his experiences in this attractively published book. It must be admitted, though, that in part the print is too small to be enjoyed by any but very junior gerontologists.

If the title evokes apprehensions that this study may be addressed to pathological and, perhaps, biochemical inquiries, the contents of the book will dispel such notions. In fact, the title is misleading, since the book concerns mainly the clinical features of the so-called "organic brain syndrome." This latter term,

A. M. MARSHALL, M.D.

1873-1964

A. M. Marshall, M.D., pioneer Chandler physician, died February 16, 1964. Doctor Marshall was a charter member of the Lincoln County Medical Society.

Born in Mexico, Missouri in 1873, Doctor Marshall graduated from the University of Missouri School of Medicine in 1898. Following graduate work at Columbi University, he established his practice in Chandler.

For many years Doctor Marshall was County Superintendent of Health.

PAUL K. HEERWAGEN, JR., M.D.

1921-1964

Collinsville physician, Paul K. Heerwagen, Jr., M.D., died February 26, 1964.

Born in Fayetteville, Arkansas, Doctor Heerwagen was a 1952 graduate of the University of Arkansas School of Medicine. His first practice was established in Collinsville in 1953. From 1959 until 1962, he practiced industrial medicine in Texas. After a brief time in Fayetteville, he returned to Collinsville in 1963. He

reflecting the trend of diagnostic "lumping," is at present enjoying a deplorable diagnostic popularity, particularly in psychiatric circles. It, obviously, is only a statement of descriptive value, contributing nothing to, and often obscuring, any etiological account. Doctor Allison's study is based on 198 "organic mental cases." Included in this number are 44 cases of cerebral tumors, eight instances of chronic subdural hematomas, and a number of other disorders not particularly restricted to senescence.

After a discussion of the technique of general physical and neurological examination of a history-taking, there are chapters concerning organic mental testing (there is very little discussion of physiological testing), acute disturbances of consciousness, amnesic syndromes, disorders

DEATHS

was a veteran of World War II, having served as a Navy fighter pilot.

Doctor Heerwagen was a member of the Oklahoma Chapter of the American Academy of General Practice.

FRANK A. STUART, M.D.

1904-1964

A long-time Tulsa orthopedic surgeon, Frank A. Stuart, M.D., died March 1, 1964 in Tulsa.

A native of Jackson, Mississippi, Doctor Stuart graduated from the University of Tennessee School of Medicine in 1930. For three years following his graduation, Doctor Stuart was with the Mayo Clinic in Rochester. He was certified by the American Board of Orthopedic Surgeons in 1936.

His practice in Tulsa was uninterrupted from 1936 until 1964 except for 46 months when he served with the Medical Corps during World War II.

Professional affiliations included his membership in the Clinical Orthopedic Society and the 20th Century Orthopedic Association. □

of speech and language, disorientation, and apraxia. In the final chapter, the differential diagnosis is discussed, particularly with regard to psychoneurosis and affective disorders.

No new knowledge is offered, but the material is presented in an interesting manner, short case-histories often demonstrating a particular point. Each chapter is documented by extensive references to the literature.

The greatest value of this book will be to the general physician and to the psychiatrist. It gives a good account of the range of clinical manifestations resulting from structural disease of the brain, even though at times it seems to take little notice of the relevance of the premorbid personality of the patient.—*G. R. Haase, M.D.* □

Miscellaneous Advertisements

Two well established doctors in dire need of an associate. A young general practitioner wanted. An industrial oil supply center town of about 100,000 population. One associate gone for specialization. May start on salary, percentage, interest, or any way desired without any expense. If interested, address inquiry to P.O. Box 3669, Odessa, Texas.

WANTED: General Practitioner to join doctor in combined clinic and 16-bed hospital. Prefer one to do OB, some surgery and anesthesia. Salary or arrangements for early partnership. Contact Louis A. Martin, M.D., Curry Clinic, P.O. Box 581, Sapulpa, Oklahoma.

AVAILABLE July 1, 1964, 1959 graduate of the University of Texas. Residency in Ob-GYN. Contact Joe Don Hughes, M.D., 1128 Winnie, Galveston, Texas.

G.P. INTERESTED in general surgery, available for practice October 1, 1964. Graduate of University of Iowa School of Medicine. Medical service completed. Contact William E. Hall, M.D., 1022 Callanan Dr., Des Moines, Iowa.

EXCELLENT opportunity for General Surgeon and General Practitioner in established group. Ideal community for family. Contact W. S. Harrison, M.D., The Chickasha Clinic, Chickasha, Oklahoma.

GP—OKLAHOMA town of 5,600. Near Tulsa. Joint Commission accredited 40-bed hospital. Adequate remuneration. Well-trained office staff including ASCP technologist. Equipment and office available—your terms. Other office space available. Specializing. Available now or July 1. Contact Key N, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

IDEAL opening for young doctor in well established medical clinic, sharing reception room and equipment with three other doctors. Wonderful location on North May Avenue, Oklahoma City. Contact Frank D. Thompson, 3115 N. Pennsylvania, Oklahoma City, JA 5-5700 or JA 4-9552.

FOR SALE: X-Ray Patrician 200 MA with all accessories except motor drive. Attractive, well cared for, and efficient machine, two years old. Discount of 50 per cent off 1961 price. \$1,000 down, will finance balance, including installation, if desired. Contact Key A, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

COMPLETELY EQUIPPED general practice available in Norman, Oklahoma. Office equipment including x-ray and ECG for sale; clinic building for lease; patient records available. Equipment and building available due to unexpected death of Robert Ryan, M.D. If interested, contact Mrs. Robert Ryan, 1017 Jenkins, Norman or Grady Ryan, M.D., Box 97, Lindsay, Oklahoma.

SOUTH OKLAHOMA City's first Medical Center needs pediatrician, internist, dermatologist and urologist for independent practice with presently established nucleus of six other specialists and close affiliation with family clinic of three G.P.'s doing volume practice. New specialties building in center will be only three minutes from new hospital now under construction. Call SU4-2246 after 9:00 p.m.

IMMEDIATE opening for General Practitioner. Practice established. Fine office space available. New hospital open only to M.D.s. Assume practice at no obligation. Contact Norman A. Cotner, M.D., Grove, Oklahoma.

OPENING for GP in established practice, northwest Oklahoma City. Large office space, share reception room with two other doctors. Excellent opportunity. Contact David A. Campbell, M.D., 2733 W. Britton Rd., Oklahoma City.

GENERAL practitioner, age 34, desires associate general practitioner in South Oklahoma City. Supportive salary and/or percentage until established. Contact Key M, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City, Oklahoma.

WANTED M.D., all phases of practice with thriving, completely equipped clinic. Industrial area in North Texas with 90 per cent hospitalization and medical insurance coverage. Start on salary or percentage basis. Write Key C, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

Let's Get Together For A . . .

AS SURELY AS the day follows the night there comes a time in the course of human events when everyone, even doctors, become sources of news. And some people are more willing sources than others.

Doctor response to the role of a news source historically has been frigid and unfriendly but in recent years there has been a warming-up trend. Incidentally, I haven't reached a conclusion on whether the new trend is a temporary condition brought on by King-Anderson, or the actual beginning of a better doctor-news media relationship.

Anyhow, it is this writer's opinion that news editors regard doctors and medical assistants in the category of least favorite people when ease of securing information for a story is concerned. My managing editor, who has been in the business 40 years, made this comment on the subject. "News cooperation is an individual matter. Some doctors are fine—some are real stinkers. I've noticed the younger M.D.'s seem to be better as a whole, however. There is a crying need for improvement and consistency in our relationship."

This editor's attitude is typical. It suggests a question—need this coolness between our groups ever be so? Is there a sort of natural, built-in conflict of interest between newspapers and doctors? I don't think so. I have some ideas that might be a step toward a better relationship, but more about these ideas later.

Let me recite a couple of incidents which happened in my town recently:

Last November a prominent Crescent man was involved in an auto accident and taken to an Enid hospital. Our newspaper was able to get most of the details from the Highway Patrol but when it came to the extent of the man's injuries, we ran into a stone wall.

The floor supervisor at the hospital wouldn't tell our reporter whether the injuries were minor, critical or fatal. She said she had been instructed by the doctor not to give any information to the newspapers. When we asked for the name of the attending physician, she said no, she couldn't give us that information either.

We attempted another source—the man's relatives, but this proved futile. They were unavailable for the most part. Supposedly, one was in the injured man's room and the supervisor wasn't about to call him to the phone. Finally, we had to go with what information we had in order to make the deadline.

At the bottom of the story we attached the following sentence: "Hospital authorities refused to tell a news reporter the extent of Mr. X's injuries or his condition." These may not be the exact words but they are pretty close to what we said. In addition, we named the supervisor on duty.

Soon after the paper hit the street, we got a call from the hospital administrator. He thought we were being unfair, unjust, etc. After recounting our difficulty in penetrating the wall of non-cooperation, built in this case by a supervisor and doctor, the administrator began to see our side and, finally, volunteered to give us the information for the next edition. Not only did he make good on this but he said if we had any future trouble to call him.

In this case we didn't want the doctor's name for use in the story. What we wanted was an appraisal of the man's condition. We wanted something in addition to the ambulance driver's opinion, "He looked pretty bad." Incidentally, the man died.

A few days ago Kansas and Oklahoma Highway Patrolmen joined in an emergency blood relay from Wichita to Enid. Our story told how the Kansas Patrol rushed the blood down the Kansas Turnpike to the state line where the Pawnee unit met them and carried the blood to Four Corners, 20 miles north of Enid. There a local unit took over for the last leg.

Twelve pints of blood were involved. Five pints had been received by airplane earlier but these were not enough.

The information from the Patrol was fine—lots of cooperation with names of drivers, routes, times, speeds, etc. Then, our reporter ran into the "hospital wall" again. He want-

ed to know the nature of the man's illness that required so much blood plus emergency use of highways and patrolmen. The lab people wouldn't give him any help, neither would the supervisor. The doctor couldn't be located. Again, the reporter had to go with an incomplete story because of deadlines.

Later our managing editor called the hospital chaplain, who after some investigation, reported the man had the mumps to begin with, then there were complications which resulted in partial paralysis and internal hemorrhaging. Finally, he told us the patient had no objection to this information appearing in the paper but did ask to have his name withheld and we complied.

There have been many experiences like these over the years. However, on publicity the hospital or doctor wants, such as stories concerning a nurses' graduating class, the cheery-cherry ladies, the candy-strippers, an open house, or doctors' day, cooperation has been excellent.

On the other hand, we have had some good tips from "cooperative" doctors. For instance, last fall one of our medical friends tipped us off to a youngster dying of leukemia. After getting permission from the parents, we did a feature story that resulted in an early Christmas for the child. Part of the "Christmas" was a money tree which well-wishers decorated with dollar bills. Within a few days of the story's appearance, there were enough "leaves" on the tree to buy a TV set. Result—the child's last few months were made a little more pleasant.

There have been similar tips—a little girl with an upside-down stomach, a quail hunter's encounter with a skunk, a man who lost a couple of toes mowing the lawn—are a few that come to mind which were volunteered by doctors.

One of the biggest things involving our newspaper and the medical fraternity happened a couple of years ago when the Garfield County Medical Society undertook the Sabin oral polio vaccine project. Enid was the second "Sabin" town in the state, so there wasn't a well-established pattern to go by.

For the most part, we dealt with two people, Doctor Bruce Hinson, who was chairman of the overall project and Doctor Hope Ross,

publicity chairman. Preliminary to an intensive publicity campaign, we sat down together and had an understanding. We, the newspaper, insisted on our medical friends stepping from behind the "anonymity" and "invasion of privacy" shield to which we had become accustomed.

We discussed timing, policies, quotes, pictures—the whole works. Everything clicked. Believe me, anything we asked for in the way of information we got. "Sourpuss" doctors became involved in the project who hadn't had their name or picture in the paper for years. Over 41,000 people turned out for the first gulp and this out of a county population of 58,000.

Not only was the Sabin immunization program a real service to the community—but by working with the doctors, our newspaper established a fine relationship which hasn't completely worn off to this date. We should work together more often!

Incidentally, I think newspaper folks were among the first to recognize a trend toward civic responsibility in the medical profession. For years now, doctors in Enid have been surprising a lot of people in accepting all sorts of assignments in church, chamber of commerce, club, school and city government affairs. On the state level, I counted 55 doctors serving on Governor Bellmon's Mental Health Advisory Committee.

Now that I've made doctors almost human—what's the next step toward a better deal for newspapers? One thing, I'm sure a lot of editors would like to have down on paper is an answer to this question, "What can a doctor do or say and stay in ethical bounds?" Other questions of interest might be—"When can a doctor's name be used in a story?" And how about invasion of privacy and the doctor-patient relationship? In other words, we need a set of ground rules.

Such an instrument surely would help clear away some of the misinformation which exists as well as provide knowledge to those on both sides who just plain don't know what a proper relationship should and could be.

This idea, of course, is neither new nor original. In other states these instruments detailing ground rules are called Codes of Cooperation.

I would suggest as a starting place—The Code of Cooperation Between the Nevada State Medical Association, and the State of

Nevada and Washoe County News Media.

This code is divided into two sections: One, Responsibilities of Physicians and Surgeons. Two, Responsibilities of Press, Wire Servies, Radio and TV. All told, the Code is five typewritten pages—too long to publish now but at least here is a small sample from Section 5:

“In matters of private practice, the wishes of the attending physician or surgeon shall be respected as to use of his name or direct quotation, but he shall give information to the press, radio and television where it does not jeopardize the doctor-patient relationship or violate the confidence, privacy or legal rights of the patient, as follows:

“A. In cases of accident or other emergency: the nature of injuries when ascertained, the degree of seriousness.

“B. In cases of illness of a personality in whom the public has a rightful interest: the nature of the illness, its gravity and the current condition.

“C. In cases of unusual injury, illness, or treatment the above information and any scientific information which will lead to a better public understanding of the progress of medical science. Any physician becoming aware of such a case is urged to notify the designated spokesman of his local medical society at once for immediate communication of appropriate information to the press, radio and television.”

The above is a small sample of the Nevada ground rules. Something similar would be a great help in Oklahoma.

If there is sufficient interest on the medical side of the fence, I suggest the establishment of a committee made up of doctors and editors. This committee should be able to work out a satisfactory code of cooperation.

If this is an exchange of articles, and I hope it will be, I think I can anticipate the lead of your editor's message to the publishers of Oklahoma: “That blankety-blank reporters never get anything right,” is a common opinion among doctors.

To a certain extent I agree. Newspaper people have no monopoly on truth. Because we must gather and assemble a lot of information hurriedly and under pressure, it is inevitable that we make mistakes. In this business accuracy is a battle you don't win—you just keep trying. With this in mind,

we're hoping for a measure of patience and understanding from doctors.

And, when we get our ground rules perhaps we of the Oklahoma press can appreciate the doctor's position and be a little more tolerant in our attitude.—*Milton B. Garber*, Editor, *The Enid Morning News*, *The Enid Daily Eagle*, President, Oklahoma Press Association. □

Marshall O. Hart, M.D.

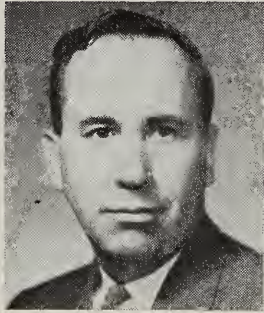
HOW DO YOU evaluate a man? Appearance? Clothes? Bank account? Social standing? These have their value, but would give no clue as to the true worth of Marshall Hart. If you base your judgment on integrity of purpose, devotion to ideals, and willingness to serve his fellowmen, coupled with a dogged determination to carry on in spite of opposition, and even with known physical handicaps, then the true Marshall Hart begins to emerge.

He was devoted to organized medicine, and particularly to the work and place of general practice. He served the Tulsa County Medical Society in places of highest official capacity. For several years, he was Speaker of the House of Delegates of the State Association, and had wrought miracles of reorganization. The same can be said of his work in the Oklahoma Chapter, American Academy of General Practice. He was Delegate to the Congress for ten years, and was on duty at the time of his death. The expression of concern, sympathy, and deep personal loss was heartwarming—a testimony to his standing and worth.

Many state doctors gratefully attest to his willingness to drop everything and come to their aid with his legal acumen, when they were involved in malpractice litigation. There is no knowing what amounts of money were saved and what tragedies were averted by his freely giving of his time, often at his own expense, even at times, perhaps, for men who had previously been somewhat less than his friends.

This has been a most difficult task of writing and has been inadequately done, I know, but there are thousands of doctors in Oklahoma and across this great land of ours who will join me in this epitaph:

HE WAS MY FRIEND.—*M. B. Glismann*, M.D. □



I would like to ask this association one big question. "Are you ready?"

Are you ready to fight for your rights as citizens of this great country? Are you ready to bury the hatchets of self-destruction within our own association? Are you ready to see your own shortcomings as well as those of others?

You say, "Has he lost his mind?" Of course, I have always defended these principles. But, have you? Have prosperity and self-satisfaction blinded us to how little we have done, or failed to show how much we have contributed to our own dilemma?

May I say this: You are ready only if you are ready to take part in the affairs of your association; only if you are willing to share and share alike the great rewards of all medicine no matter which part needs your understanding and help; only if you spend much time improving the image, respect and general welfare of all the profession regardless of the satisfaction of self, materially and "glorywise"; only if you are willing to give your time and money (yes, I said money) to let the public know that we are ready to be as great as the profession that we profess designates us to be.

Let us not search out enemies to do battle with. (Heaven only knows that we already have enough.) We could easily be swallowed up by the multitude. Let us cultivate our many friends and find new friends so that the multitude will sweep us to our goals. We have many friends that are anxious to help us achieve the purpose that I am sure we all strive for. We of the medical profession and paramedical services should not have to stand on what we want but on how to reach the goal. I am convinced that the medical association, the hospital association, the Blue plans, the nurses associations and the health department under Doctor Mosley, have the same goal. That is: Freedom to serve the American people better and to give them the greatest medical service known in the world. To be allowed to reach these principles we must close ranks. Now is the time. Tomorrow may be too late. One of this group cannot be compromised without destruction of them all. Never has it been so true as in our case now: "United we stand, divided we fall."

As president of the association, I invite you to join me in the task ahead.

Harlan Thomas MD

An Approach to Tumors of the Lateral Nasal Wall

JAMES B. SNOW, JR., M.D.

A surgical approach to the lateral nasal wall is presented which allows effective management of the major mechanical problems involved in adequate resection of tumors of this area.

TUMORS OF THE lateral nasal wall present a number of problems in their surgical management. These problems exist in both benign and malignant tumors. Benign tumors of the lateral nasal wall may be malignant by position. That is, they may produce disabling or fatal complications by their proximity to the orbit and the cranial cavity. Bleeding from benign nasal tumors may lead to exsanguination because of the unusually rich blood supply of the area.

The specific problems involved in excision of tumors of the lateral nasal wall are difficulty in ascertaining the extent of the tumor's attachment and difficulty in adequate exposure to permit the proper control of hemorrhage during the operation and to permit an *en bloc* resection of the tumor. In particular the superior, posterior and lateral extent of the tumor must be determined to permit adequate removal.

Sir William Fergusson in 1845 introduced an approach to tumors of the nose and para-

nasal sinuses which was essentially what is now called a lateral rhinotomy and included splitting of the lip in the midline as well as a horizontal incision along the inferior orbital rim for reflection of the soft tissues of the face laterally.¹

Later Moure added to this approach the removal of the ascending process of the maxilla.² Ellis in 1943 and Havers in 1944 further modified this procedure to include removal of the lamina papyracea for access to the ethmoid air cells.^{3,4}

The Moure-Fergusson approach is a tremendous advantage over an intranasal removal of the tumor in which all work is done through the intact nasal vestibule. However the Moure-Fergusson approach has the disadvantage of approaching the tumor from only one direction and therefore by necessity results in the piecemeal removal of the tumor from before backward. Difficulty results from being unable to determine the superior and posterior extent of the tumor as well as its lateral extent.

CASE REPORT

Our attention was directed to this problem by the case of an 18-year-old girl who was first seen in April 1956 at the age of 11 years. She presented with a history of difficulty breathing through the left side of her nose for six weeks. She also had mild epis-taxis from the left side. Her physician had found and biopsied a tumor of the left nasal cavity which was an olfactory neurocytoma.

Presented at the Seventh Annual Rotating Clinical Meeting of the Oklahoma Chapter of the American College of Surgeons, February 29, 1964.

In May 1956 a lateral rhinotomy was performed at the Children's Memorial Hospital. A large mass attached to the superior meatus and anterior portion of the left ethmoid bone was removed. Her post operative course was uneventful and she did well until May 1962. At that time she again noted difficulty breathing through the left side of the nose and began to have moderately severe epistaxis. A biopsy revealed an olfactory neurocytoma or what we would now call a nasal neuroblastoma. In December 1962 an attempt at intranasal removal of this tumor through the intact left nasal vestibule was made. The removal was incomplete and discontinued because of the brisk bleeding encountered.

Persistent tumor was again biopsied in April 1963 but because of the patient's pregnancy, further surgery was delayed until after her delivery in September 1963. In October 1963 she had a combined lateral

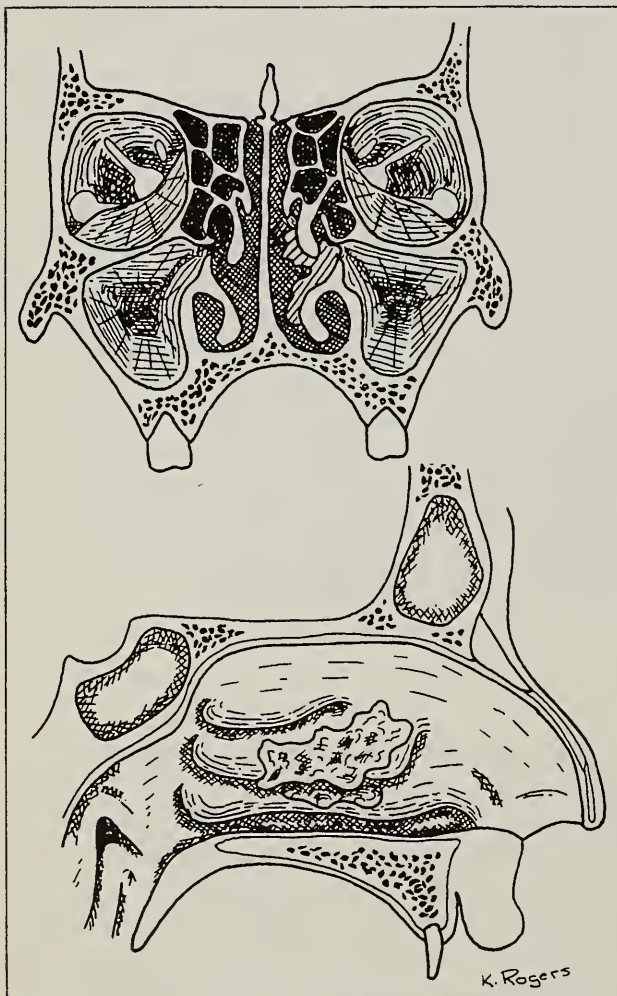


Figure 1

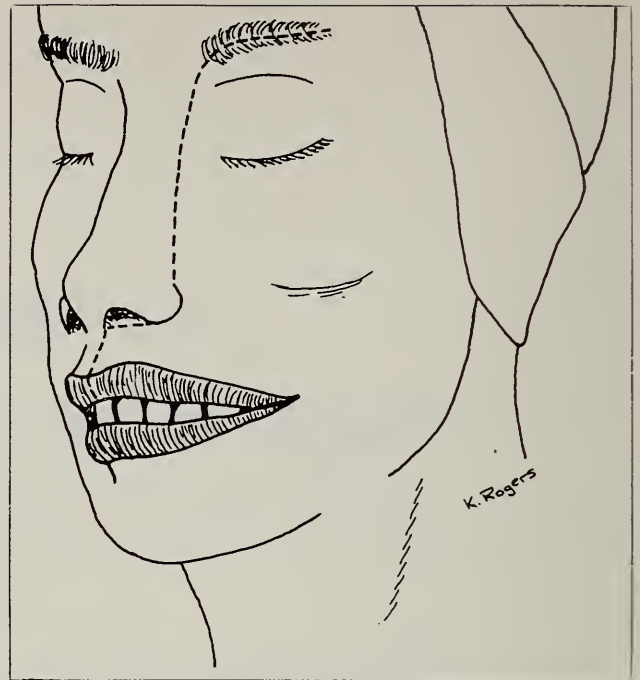


Figure 2

rhinotomy, canine fossa and external ethmoid approach.

At this time her tumor was situated in the left lateral nasal wall as is illustrated in Figure 1.

The incision used is a modified Fergusson with a Killian extension as illustrated in Figure 2.

This incision is begun in the eyebrow. The incision is carried medially and inferiorly on the lateral wall of the nose passing half-way between the midline and the inner canthus. It is carried inferiorly in the nasolabial fold. It is extended medially around the ala of the nose to the midline. The lip may be divided in the midline as illustrated in Figure 3 or an incision in the alveolar sulcus as used in this patient will give access to the anterior wall of the maxillary sinus.

The periosteum of the anterior wall of the maxillary sinus is elevated and the soft tissues of the face are reflected laterally. The canine fossa or anterior wall of the maxillary sinus is thereby exposed. The nasal cavity is entered through the pyriform aperture. The orbital periosteum is separated from the medial wall of the orbit. The lacrimal sac is reflected with the orbital periosteum. The orbital periosteum and the orbital contents are retracted laterally. The bone of the lamina papyracea is removed superiorly to the level of the anterior and

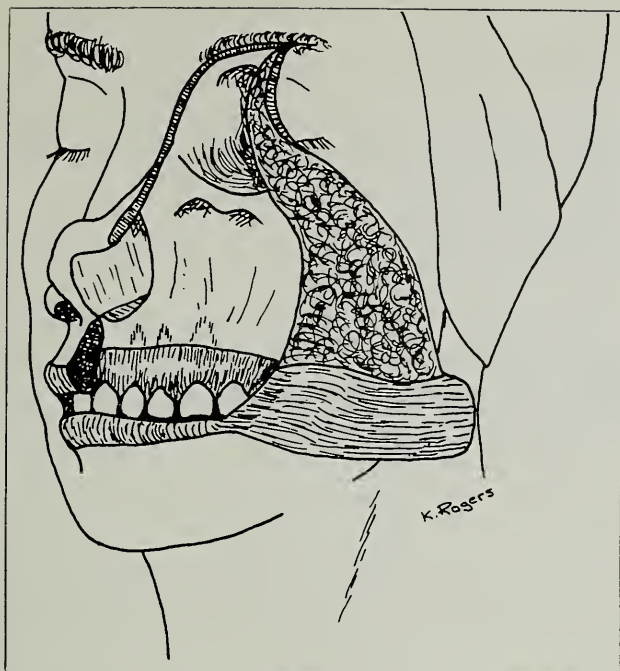


Figure 3

posterior ethmoid arteries which mark the level of the cribriform plate. This removal of the medial wall of the ethmoid cell block is illustrated in Figure 4.

The ethmoid cells are exenterated exposing and circumscribing the superior extent of the tumor. The bone of the canine fossa of the anterior wall of the maxillary sinus is removed exposing and circumscribing the lateral extent of the tumor. That portion of

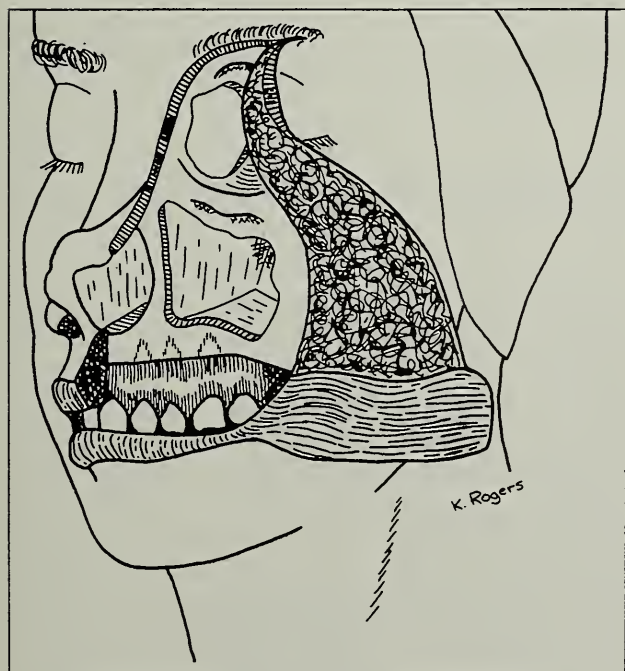


Figure 4

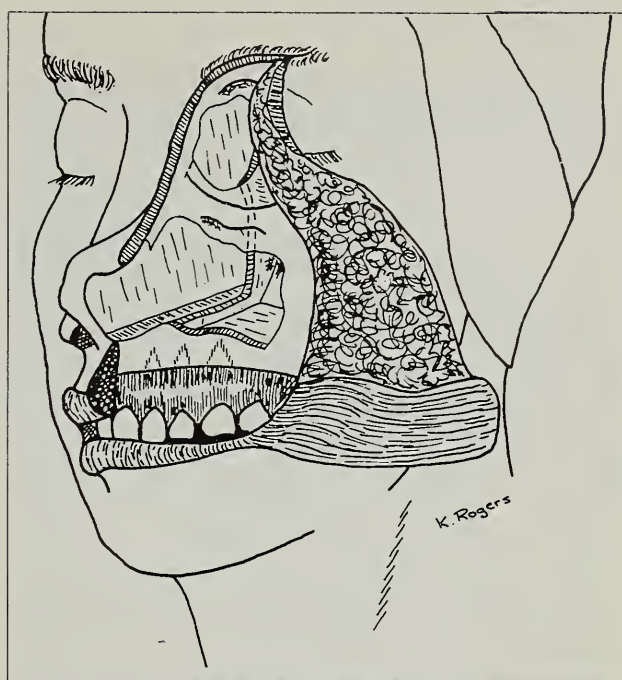


Figure 5

the ascending process of the maxilla and the nasal bone necessary for adequate anterior exposure and resection of the tumor is removed. The tumor may then be excised *en bloc* with adequate visualization of all of its margins.

The superior margin of the resection is divided with heavy scissors placed through the pyriform aperture which has been considerably enlarged by the removal of the ascending process of the maxilla and the anterior wall of the maxillary sinus. The posterior margin of the resection is also divided with heavy scissors placed through the exenterated ethmoid cells. The inferior attachment of the lateral nasal wall to the floor of the nose is divided near the floor with chisel and mallet. The completed resection is illustrated in figure 5.

One month post operatively numerous biopsies of the resected margin failed to show

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Doctor Snow is a member of the American Academy of Ophthalmology and Otolaryngology.

any residual tumor. This patient has continued to do well with no evidence of recurrence.

DISCUSSION

The advantage of the external ethmoid approach is that the superior and posterior extent of the tumor can be determined and circumscribed. The advantage of the canine fossa approach is that the lateral extent of the tumor can be determined and circumscribed. With the large opening in the anterior wall of the maxillary sinus the amount of the ascending process of the maxilla to be removed can be determined. In this manner the tumor can be removed with one or more centimeters of normal tissue along each margin. This truly *en bloc* resection obviates any violation of the tumor mass itself. The cosmetic deformity after careful repair of the soft tissues of the face in layers is minimal because no significant amount of bone responsible for facial contour is removed. The amount of intranasal crusting is no greater than would occur from the more conventional lateral rhinotomy approach.

Two other patients with similar problems of malignant tumors of the lateral nasal wall have been treated with the same approach.

One is a 40-year-old woman with an adenoid cystic carcinoma of the right lateral nasal wall. Another is a 48-year-old man with a squamous cell carcinoma of the left lateral nasal wall who was treated previously with radiation therapy.

SUMMARY

A patient with a tumor of the lateral nasal wall is presented and the surgical approach used is described and illustrated. This approach is not new but merits more emphasis.

This modification of the lateral rhinotomy has given us greater assurance of encompassing the whole tumor especially its superior, posterior, and lateral extent. We have not encountered any serious complications with its use and feel it should have further trial.

ACKNOWLEDGMENT

The author wishes to thank Kenneth A. Rogers, Jr., M.D. for his illustrations of this procedure.

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- 800 N.E. 13th Street, Oklahoma City, Oklahoma

OU MEDICAL SCHOOL ALUMNI TO REUNITE AT AMA MEETING

The Alumni Association of the University of Oklahoma School of Medicine is planning a reunion in connection with the annual meeting of the American Medical Association, San Francisco, June 21-25, 1964.

Scheduled for June 22nd from 6:00 p.m. - 8:00 p.m. in the Olympian Room of the Olympic Club, 524 Post Street, San Francisco, the event will feature cocktails and hors d'oeuvres. Since it will be partially undewritten by the association, tickets are only \$5.00 per person.

Advance ticket reservations may be made by writing Kemp H. Dowdy, M.D., 450 Sutter Street, San Francisco 8, California. Tickets will also be available at a booth near the AMA meeting registration desk, and at the door of the Olympian Club. □

CREEPING ERUPTION

Effectiveness of Thiabendazole Therapy

ROBERT J. MORGAN, M.D.
HORACE B. MOSS, M.D.

"A specific," the epitome of therapy research, seems to have been found in this palatable and relatively safe antihelminthic. Ancylostoma larvae migrans has dramatically cleared with Thiabendazole therapy.

INTRODUCTION

CREEPING ERUPTION (Larva migrans, Myiasis linearis, Sandworm disease) is a cutaneous infestation due to larvae. The most common larvae which can cause the condition in this country are *Ancylostoma braziliense* and *Ancylostoma caninum*, dog and cat hookworms. Larvae of the horse bot-fly or *Gastrophilus* and of pig and cat nematodes of the genus *Gnathostoma* as well as others have produced similar lesions in man. Acquiring the larvae by humans is usually from bodily contact with moist sand or earth contaminated with the excreta of dogs or cats which are infected. The most common sites of involvement are the feet, buttocks, hands, genitals, or any part of the skin which may be exposed to the contaminated soil. Creeping eruption might be considered an occupational disease of gardeners, plumbers, life guards, firemen, house appraisers, and

pest control workers. Children also are commonly affected.

The larvae penetrate the exposed skin (or often the skin through thin clothing) within five to ten minutes. The symptoms of itching begin within twelve hours after exposure. Erythematous papules and vesicles may form by twelve to eighteen hours after exposure. Subsequently, serpiginous channels form due to migration of the larvae through the epidermis (figures 3 and 4). Migration may be delayed for several days or even months. The serpiginous channels are marked by elevated, erythematous lines which become vesicular. Scratching often produces eczematization. Topical medicines often produce a superimposed inflammatory response. The lesions may become secondarily infected by bacteria and become purulent.

The duration of larvae migrans is variable. Spontaneous healing has occurred in two weeks; however, spontaneous healing has not occurred in some instances for several years. Although the itching produced is extremely distressing to the patient, the condition is benign. Death has resulted rarely and only in those cases associated with the development of a Loeffler's Syndrome. The only significant laboratory change to be noted is a marked eosinophilia in patients with numerous lesions.

An "extremely effective" treatment for Larva migrans was reported by Mullins, *et al.*, at the 1963 Southern Medical Association.¹ Prior to his announcement, best re-



Figure 1. Papular, vesicular and channeling lesions of scapula nine days after onset.

sults were obtained by freezing the larvae with ethyl chloride or solid carbon dioxide. Hitch² has shown that blistering and peeling of the skin is necessary to remove the larvae since the larvae can remain viable in the frozen state thirty minutes or more. The "extremely effective" treatment referred to above is Thiabendazole.

THE DRUG

"Thiabendazole (MK-360) is a white crystalline compound which melts with decomposition at 298 to 299° C. It has the empirical formula $C_{10}H_7N_3S$ and has a molecular weight of 201.3. It may be titrated with acid with an equivalent weight of 201 and a pKa of 4.7. It is slightly soluble in water; its solubility is a fraction of pH, being more soluble in dilute acids and alkali than at neutral pH. Its maximal solubility is at pH 2 where it will give a 0.5 per cent solution.

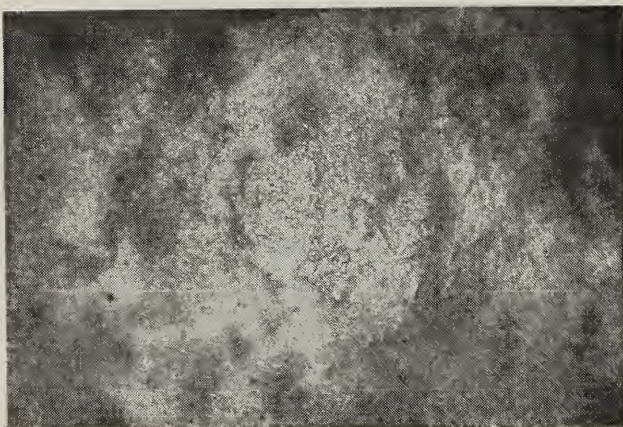


Figure 2. Close up of indeterminate number of channels three weeks after onset.

It is slightly soluble in alcohol, esters, and chlorinated solvents. It is soluble in dimethyl formamide. MK-360 has a characteristic ultraviolet absorption in 0.1 N HCl with maxima at 304 millimicrons (A1% 1 cm 1230) and at 243 millimicrons (A1% 1 cm 625). It has also a characteristic fluorescence in acid solution with a maxima at 370 millimicrons using a 310 millimicron excitation frequency. It is a stable compound both as a solid and in solution and will form colored complexes with metals such as iron."³

Extensive studies of the antihelminthic activity of Thiabendazole against gastrointestinal parasites of sheep, cattle, goats, swine, and dogs have been done.⁴ The compound has been found to have a broad antihelminthic spectrum effective against numerous roundworms and certain tapeworms, especially roundworms of the orders *Strongyloides* and *Ascaroidea*. The drug also has a limited effect on hookworm, roundworm and whipworm infestations in dogs. Thiabendazole has also been evaluated for human use.⁵ It has been found highly effective against *Strongyloides*, moderately effective against *Ascaris*, *Necator americanus*, *Ancylostoma duodenale*, *Enterobius vermicularis*, and less effective against *Trichuris*.

Toxicity studies in animals show Thiabendazole to have a low toxicity⁶ with a wide margin of therapeutic safety. Side effects reported during the use of Thiabendazole in humans consist of dizziness, nausea and vomiting. Epigastric pain, drunkenness, anorexia, heartburn, diarrhea, weariness,

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Doctor Morgan is a Fellow of the Academy of Dermatology, a member of the Oklahoma State Dermatology Society, the Oklahoma City Dermatology Society and the Oklahoma City Clinical Society.

A graduate of the University of Texas Southwestern Medical School, Horace Bailey Moss, M.D., is presently taking a residency in dermatology at the University of Oklahoma School of Medicine.

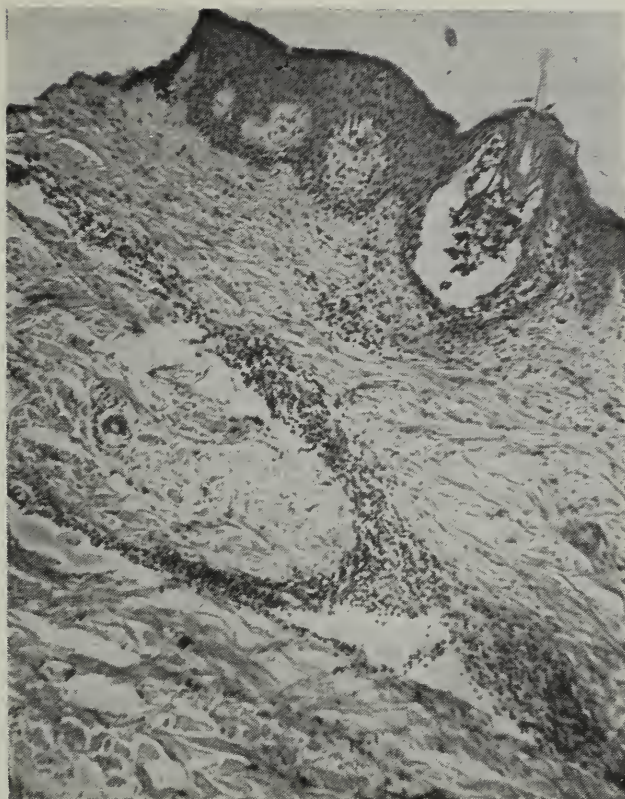


Figure 3



Figure 4

Figures 3 and 4. Histopathology showing characteristic intraepithelial spaces and channels measuring the size of 2 to 20 epithelial cells.

drowsiness, bradycardia and headache were observed rarely.

In addition to its antihelminthic properties, Thiabendazole is presently under investigation as an antifungal agent.⁷ *In vitro* antifungal studies have shown a high degree of activity against a variety of saprophytic and pathogenic fungi. Among these fungi are the dermatophytes, *Microsporum* and *Trichophyton*. This compound indeed offers promise and deserves keen interest and awareness in subsequent investigational reports of its use.

The status of the drug is still investigational.* It is supplied in a 20 per cent suspension (5cc = 1.0 gm base of Thiabendazole) and as a chewable wafer containing 0.5 gm base of Thiabendazole. Both of these forms are pleasantly flavored and quite palatable. The dosage commonly employed in its evaluation for human use is 50 mg per kgm given as one dose after breakfast. In infestations not responding to the single dose, 50

mg per kgm has been given for three successive days.

CASE REPORT

Mr. R.C.S., a 45-year-old mechanic, began to develop skin lesions on July 4, 1963. The lesions were most prominent over the scapular areas bilaterally and were characterized by marked burning and itching. Numerous proprietary medications were applied without benefit. His family doctor gave him antihistamines and steroids because of the possibility that it might be an allergy. The patient obtained most relief from standing under a cold shower. Questioning revealed that he crawled under a house on July 1. Examination on July 9 showed hundreds of follicular, papular lesions, some of which were surmounted by small superficial vesicles and pustules. The lesions were prominent over the entire back (especially the scapular areas), the buttocks, the calves of his legs and the waist (see figure 1). Other lesions were scattered over the entire body.

*The authors are indebted to Merck, Sharpe and Dohme Co. for supplying the Thiabendazole used in the study of this case report.

Extending from three of the erythematous papules were channels approximately one cm in length. Phenergan® 50 mgs q. i. d. and Amend's iodine five drops t. i. d. were started orally. Boric acid one dram in witch hazel, was to be applied topically with an atomizer. On July 12 the channels were more prominent. The patient had some difficulty breathing. He was admitted to St. Anthony's Hospital, Oklahoma City. Roentgenograms of the chest were normal. There was a leukocytosis of 12,000 white blood cells per cubic millimeter with six per cent eosinophiles. During the hospital course, Phenergan was continued and Amend's iodine was increased to ten drops t. i. d. After five days, a severe iodine rash developed necessitating discontinuance of iodine therapy and institution of temporary steroid therapy. The iodine rash was controlled within two days. A seven day course of Fuadin injections was given without improvement in the larva migran lesions. Injections of BAL were given without benefit. Chloroquin 50 mgs t. i. d. was then started and the patient was discharged to be followed as an outpatient.

A number of measures were then undertaken to determine their possible beneficial effects: Solid carbon dioxide applications were given to the right scapular area; Quatrasal® spray was applied to the abdomen, benzyl benzoate emulsion was applied to the right scapular area (below the CO₂ application); and ultrasound was given over the upper right arm (15 min. at three watts per cm daily for one week). On July 30 there was equivocal improvement only in the area where Quatrasal® was applied; others were not improved. Temaril® was then prescribed for itching and later Periactin® was also tried. On August 2 a Desenex® aerosol spray was tried. A course of Hetrazan was given without benefit. On August 20 he was given tetrachloroethylene, three capsules which was repeated after five days. Also Chrysarobin three per cent in washable base was prescribed. There was questionable improvement after Chrysarobin; however he developed an irritation which necessitated temporary steroid therapy again. On September 5 the rash was almost clear but there were many new lesions. Ethyl chloride was given for use at home as needed for itching.

On September 19 a course of Antepar was given (seven 3.5 mg tablets daily for three days) with no benefit. On September 30 the patient developed an abscess of the left leg due to secondary infection. The abscess was treated with hot packs locally and Ilosone® 250 mgs four times daily orally. An erythematous dose of ultraviolet was given over an area on the patient's back. On October 8, because some of the lesions were thought to have sloughed due to the ultraviolet light, another erythematous dose was given to a second area without benefit. On October 31 the patient was given Butazolidin 100 mgs three times daily because of arthritis (this was a previous existing intermittent problem prior to and not associated with the Larva migrans). On November 8 a white blood cell count was normal except for 15 per cent eosinophilia.

On November 26 there were numerous persistent lesions. There were estimated around 300 such lesions over various areas of the body. Thiabendazole five teaspoons daily (1 gm per teaspoonful) was prescribed in divided doses (2-2-1). All other medications were discontinued. The patient did not take the medication as prescribed but as follows. The first evening he took two teaspoons. The following day he took the originally recommended five teaspoons but felt dizzy. The next day he was still dizzy so he took only two teaspoons. On this day the itching stopped. The following day he felt slightly dizzy all day and did not take any medication. The next day he had some itching on one of his shoulders and he took three teaspoons. The following day there was no itching or dizziness and he took a full five teaspoons. The following day he was dizzy and only took two teaspoons. The last day of therapy, December 3, he was slightly dizzy and took three teaspoons. On December 6 his skin was entirely clear. There was no significant change in the blood count taken immediately prior to Thiabendazole therapy and one taken three days after cessation of therapy except for a reduction in eosinophiles from 13 per cent to seven per cent. The dizziness cleared promptly after cessation of the drug. In addition to transient dizziness, the patient noted that his stools were unusually foul. He has remained symptom free and on January 13, 1964, his blood count was normal.

CONCLUSION

This case illustrates the usual persistence of Larva migrans in patients with widespread lesions. More important, however, this case points out the difficulties and frustrations encountered in treatment of this condition. The response to Thiabendazole treatment was gratifying in its elimination of itching essentially after the first day's therapy and in the complete clearing of the patient's skin shortly after cessation of therapy. The results substantiate the prudent and hopeful enthusiasm of Doctor Mullins for the use of Thiabendazole in the treatment of creeping eruption.

ADDENDUM

Since this paper was completed two additional cases of creeping eruption have been treated with Thiabendazole.

Case No. 1. W.W., a seven-year-old boy, contracted Larvae migrans on his hands in the summer of 1963. The usual forms of treatment had been unsuccessful. He was started on Thiabendazole. 50 mgs. per kgm. on January 21, 1964. By January 27 the activity had disappeared and there had been

no return of symptoms by April 4, 1964. Mild nausea was the only side effect. This case was treated in conjunction with Doctor Mark Allan Everett.

Case No. 2. J.D.H., 35 years old, developed creeping eruption lesions in the fall of 1963. The usual means of cryotherapy were unsuccessful. Thiabendazole, five teaspoonsful, was given March 27, 1964. He had vertigo after the second dose and nausea after the third dose. The next day he took three teaspoonsful but vomited the last two and has received no treatment since then. He has had no itching since his last dose of Thiabendazole April 6, 1964 and there has been no evidence of recurrence. This case was treated in conjunction with Doctor Tom Nix. □

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DUER AWARDS REHAB CHECK

Annually, the Oklahoma State Medical Association sponsors an expense-paid trip to Washington, D.C., for the English teacher of the first-place winner in the essay contest sponsored by the Governor's and President's Committees on Employment of the Handicapped.

Joe L. Duer, M.D., immediate past-president of the Oklahoma State Medical Association, presents an award of \$250 expense-paid trip to Washington, D.C., to Mrs. Leslie Howard, teacher of the first-place essay contest winner for the State, Miss Carol Greenwood, at the Award Presentation in the Blue Room of the State Capitol.

Doctor Duer complimented the teachers for taking an interest in the program, pointing out the importance of returning citizens to a productive way of life. □



Incidence and Types of Poisonings in Childhood

INCIDENCE

RUSSELL F. SHAW, M.D., M.S., (Med.)

Accidental poisonings in children represent a serious and often unrecognized health hazard. An epidemiologic approach to the problem serves to pinpoint the areas of greatest concern.

ACCIDENTAL POISONINGS of children have been recognized as a serious problem for many years. Proper medical treatment of this class of accidents has been the subject of more intensive study than any other group of childhood injuries. The reasons for this probably include the dramatic nature of many of the events and the clear recognition that such injuries are, in hindsight, easily preventable.

Less well documented are the epidemiologic factors concerned in accidental poisonings. It is the purpose of this paper to review briefly the experience of the Columbus, Ohio, Regional Poison Control Center and also present a short review of environmental and personal factors which affect the risk of poisoning in children.

Presented at a Postgraduate Pediatric Course December 12, 1962, at the University of Oklahoma Medical Center, Oklahoma City, Oklahoma.

From the Department of Pediatrics and Children's Memorial Hospital, University of Oklahoma Medical Center, Oklahoma City, Oklahoma, and the Division of Chronic Disease, Oklahoma State Department of Health.

It is difficult to estimate accurately the incidence of poisonings in children since many produce no clinical effects and are not investigated. Nationwide, over 400 deaths each year are reported due to accidental poisonings in children under the age of six. This gives very little indication of the true extent of the problem, however. The Columbus Regional Poison Control Center serving a population of approximately three and one-half million people, in one year handled 3,464 telephone requests for information and treated an additional 2,148. Of the treated patients, 271 were considered serious enough to be admitted to the hospital. These figures probably come closest to estimating the true incidence of poisonings in children.

Table I

Types of Agents Ingested		
Substances Ingested	Number of Cases/Yr.	Percent of Total
Internal Medication	2133	38
Household Products	1163	21
Cosmetics	501	9
External Medications	306	6
Petroleum Products	283	5
Pesticides	260	5
Paints	195	4
Plants	163	3
Others	572	10
Unknown	26	0.5
Total	5602	100%

Table II
Types of Poisonings
Prompting Admission to Hospital

Classification	Number Cases/Yr.
Internal Medicine	116
Household Products	84
Petroleum Products	34
Plants	13
External Medication	10
Others	14
Total	271

TYPES OF AGENTS INGESTED

The various agents involved in poisoning episodes are presented in table 1. Of those children requiring hospitalization the breakdown of agents involved is included in table 2. The two most common classes of poisons, Internal Medication and Household Products, are further broken down into specific groups in table 3.

ENVIRONMENTAL FACTORS

Eighty-seven per cent of all childhood poisonings occur in the victim's own home. The most common areas in the home to be involved are the kitchen and bedroom. This is where the child spends the greatest part of his playing day.

The removal of a substance from its original container and its transfer to a household utensil is a contributory factor in over 60 per cent of all poisonings. The most common offenses are placing bleach in a drinking glass, kerosene in coffee cans and turpentine in glass jars or soft drink bottles. In addition all of these toxic substances are usually easily accessible to the child since they are stored on the floor, under the sink, on a table or in open cabinets.

Table III
Specific Toxic Products
Prompting Admission to Hospital

Internal Medications		Household Products	
Aspirin	60	Drano	61
Barbiturate	15	Bleach	14
Dilantin	5	Lye	10
Amphetamine	4	Chlorox	8
Thyroid	5	NH ₄	5
Tranquilizer	4	Miscellaneous	6
Iron	4		
Miscellaneous	19		
Total	116		84

Unfortunately, a false sense of security is often engendered by such "safety" features as child-safe bottle caps and locks on medicine cabinets. If all household medicines and products were looked upon as potential poisons, these measures would be regarded as only relative, rather than absolute safety devices.

PERSONAL FACTORS

The peak age for childhood poisonings is 20-28 months. We might explain this on the child's stage of development. At this age most children are given to exploration, but with little caution or experience. Further personal factors are found, however, in the group of two year olds who ingest poisonous materials.

The majority of ingestions occur less than one hour before the child's usual mealtime, a time characterized by mothers as "my busiest moment during the day." Many of the children are just recovering from an illness for which they had medication offered them. The combination of gaily colored and cherry flavored medicine offered as "candy" and then left unattended in some easily accessible spot is an almost irresistible temptation to most two year olds.

Most poisonings under these circumstances also involve an element of "social play." An unusually imaginative and resourceful child playing doctor or presiding at a tea party will invariably find medications or cleaning solutions "useful" in their play.

When the family of a youngster with a history of repeated poisoning incidents is studied, over 50 per cent show significant disturbances in family balance. Often the mother is working or there are frequent separation experiences of the child from his par-

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ents. These families very often keep more medications in their home than a control group and tend to use them much more readily for minor complaints.

COMMENT

In view of the epidemiology of childhood poisonings, it is difficult to view them as "accidents." So many times such injuries are, in hindsight, easily preventable. The implications of this concept of poisonings is obvious. A considerable burden of responsibility rests with the physician who prescribes medication for the sick child. "Active immunization" of the parents to the potential hazards of household medications should be

a part of every physician's routine well-child care.

SUMMARY

Examination of the personal and environmental factors which affect the risk of childhood poisonings reveal that the majority of such "accidents" could be prevented. The family physician, through awareness of these predisposing factors could play an important educational role in the prevention of childhood poisonings. □

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THE MONTH IN WASHINGTON

The American Medical Association and the American Pharmaceutical Association have warned Congress that too stringent regulations for clinical testing could result in valuable new drugs not being approved.

The two associations testified before a House Government Operations subcommittee, headed by Rep. L. H. Fountain (D., N.C.) during its study of drug safety requirements from both government and industry aspects.

The American Medical Association testified that "even the most extensive pre-marketing clinical tests cannot always be relied upon as completely predictive of human toxicity."

Doctor Hugh H. Hussey, director of the AMA's Division of Scientific Activities, told the subcommittee that "it is entirely possible that more lives could be lost by keeping a valuable drug off the market during extensive clinical trials than would be saved by gaining a precise knowledge of the exact type and incidence of all side effects.

"Physicians realize that no drug can be considered completely safe. There is always an element of risk, no matter how small, whenever a chemical agent is administered to a patient. That risk can be minimized by adequate animal testing and pre-marketing

clinical trials; it can never be eliminated."

Cautioning against government regulations that become unnecessarily burdensome and restrictive, Doctor Hussey said the vital knowledge about drug toxicity "can be obtained only by utilizing the combined experience of the ultimate evaluators of drug safety—the well informed practicing physicians of the United States."

The American Pharmaceutical Association said that it was "concerned that the hysteria of the moment about drug safety could develop into an unwritten protocol of indecision and delay."

William S. Apple, executive director of the APA, said "the general public and individual patients must be informed that a benefit-to-risk ratio will always exist, and that every effort is being made to reduce the risk and increase the benefit."

* * * * *

The American Medical Association has reiterated its opposition to military veterans getting free hospital services for non-service-connected disabilities and illnesses. Two bills under consideration would make four million men eligible for complete outpatient care, regardless of service connection of disabilities and without respect for ability to pay. □

White Sound and Schizophrenics' Reaction to Stress

VLADIMIR PISHKIN, Ph.D.*
DAVID HERSHISER**

White sound function under induced stress was investigated with schizophrenics and normals. Physiologically, differential responses were demonstrated by the groups. Oxygen saturation, fear and anger constructs were inferred in explanation of findings.

ANALGESIC PROPERTIES of white sound have been demonstrated in dental procedures.¹ In an attempt to control agitation and anxiety of psychiatric patients it was assumed that white sound may be applicable in reducing such symptoms, since many of the psychotropic drugs involve toxic effects.² No specific hypotheses could be made in regard to the effects of white sound with schizophrenic patients, since there is also evidence that noise can produce noxious effects in terms of impaired psychomotor performance, irritation, discomfort and rise in blood pressure. In addition, there is evidence that white sound, per se, is not an analgesic

through stimulation of a large area of the auditory nerve endings, but rather that it is a distracting stimulus potentiated by suggestion of possible analgesia.³

It has also been shown that irritation and dizziness may result, with decreased oxygen saturation as a function of rhythmic auditory stimuli. That finding would suggest the opposite hypothesis in that white sound would serve as a noxious stimulus for those subjects suffering from relative anoxemia, and it was postulated earlier that low oxygen saturation may be characteristic of mental illness.⁴

In an attempt to examine plausibility of stress reducing effects of white sound under induced pain, 40 chronic undifferentiated schizophrenics and 40 normal-controls who were employees at the same hospital served as voluntary subjects. All subjects were between the ages of 25 and 50, with the schizophrenic group having a mean length of hospitalization of 61.35 months. Twenty subjects in each group were exposed to white sound while the other half were conditioned without it. Frequency of respiration and GSR were utilized as measures of reaction to pain stimulus. All subjects were given a series of electric shocks of ascending intensity until a subjective pain level had been reached. For the remainder of the experiment this particular level was held constant and served as the unconditioned stimulus (normals' $\bar{X} = 4.79$, schizophrenics' $\bar{X} = 4.62$ milliamps). This conditioned stimulus was a 15 w. light which was presented for five seconds and was

This report is based on the data which were presented and analyzed in a more detailed version in: Pishkin, V., and Hershiser, D. Respiration and GSR as functions of white sound in schizophrenia. *J. Consult. Psychol.*, 1963, 27, 4, 330-337. This report is published with the permission of the American Psychological Association.

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immediately followed by the shock for a duration of two seconds. There were 20 conditioning trials in all and they were preceded by 10 adaptation trials (CS alone). The white sound was presented with a commercial stereophonic system with a 40 w. amplifier and two sets of speakers. The intensity of white sound and music was at a constant 70 db. at the location where the subject was seated. The white sound was reproduced in combination with symphonic music used for analgesic effects.⁵

The most noteworthy finding was that there was a significant difference between schizophrenics and normals in their responsivity to white sound condition. This difference was both in terms of GSR and respiration parameters, whereas the frequency of respiration was significantly higher for schizophrenics than normals in all conditions, i.e., in adaptation and conditioned responses (p s between $<.05$ and $.02$). On the other hand, the normals' change in GSR conductance (micro-mho) was significantly higher during adaptation as well as for conditioned response and unconditioned response ($p < .02$). Schizophrenic patients' response also had a higher respiration rate under white sound conditions than their respective control group. In addition, the data demonstrated lack of GSR conditioning in schizophrenic group. The general trend of significantly higher conditioned response as well as unconditioned response in GSR of normals with white sound was clearly evident. This effect was significant in the comparison of the last five trials between normals with white sound and normals with no white sound ($p < .05$).

Thus, it must be concluded that white sound functions as a noxious stimulus for both the groups, although responsivity was differentiated in channeling of physiological reaction to this noxious stimulus.

There are two possible explanations for the above findings. One plausibility would be that of fear-anger differentiation.⁶ It could be assumed that since anger has been shown to be associated with higher changes in GSR and whereas fear was closer associated with higher respiration frequency, it may very well be that the two populations have

subjectively responded in a clearly distinguishable manner which was reflected in differential physiological responsivity. The other explanation would be couched in terms of propositions of Lovett Doust and Schneider, who suggested that lower oxygen saturation is predominant in mentally ill individuals.⁴ This postulate would account for higher respiration of the schizophrenic population. Nevertheless, one important question remains unanswered, and that is why there was no difference between normal and schizophrenic populations without white sound in response to the shock. It is plausible that white sound potentiates the stress effects of electrical stimulation to a greater degree with schizophrenics than with normals.

A very obvious follow-up would be to create clearly cut situations resembling fear or anger experiences as influenced by white sound and also to make assessment of oxygen blood level for the white sound conditions. The findings do not necessarily exclude the possibility that white sound may function as an analgesic at lower levels of intensity. Nevertheless, it is important to note that responsivity to white sound is highly distinguishable between normal and schizophrenic populations. This consideration must be taken in account in application of dental analgesic procedures involving psychiatric patient population such as tested in this investigation.

SUMMARY

Possible application of white sound in control of induced anxiety was investigated with

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schizophrenic and normal populations. Even though there is evidence that analgesic properties of white sound have been demonstrated in dental procedures, present evidence is that at subjective 70 db. level it produces a noxious effect. Differential responsivity of schizophrenics and normals was demonstrated to white sound with significantly higher respiration rate in the patient sample and significantly greater change in GSR conductance in normals. Since the physiological parameters indicated this difference, it was postulated that either lower oxygen saturation in schizophrenics or distinguishable, subjective experience of fear for patients and

anger, for normals, accounts for differential physiological function of white sound in the two populations. □

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ECONOMIC EFFECTS OF OVER-INSURANCE

In 1959, one out of every ten insured hospital patients had multiple hospital expense coverage which paid aggregate benefits of \$1.44 for every \$1.00 of actual expense incurred, according to a recent appraisal of "over-insurance" by the Health Insurance Council.

A Status Report to the National Association of Insurance Commissioners submitted by Blue Cross, Blue Shield, and the Health Insurance Association of America (May 1960) listed six adverse economic effects of over-insurance. All of these are contrary to public interest, according to the report, in that they distort the function of the health insurance mechanism and violate basic insurance principles.

1. Unnecessarily increasing premiums due to its effect on claim frequency and costs.
2. Encouraging the insured patient to demand unnecessary or luxury services and care.
3. Encouraging patient demands on the practicing physician for unnecessary hospital confinement and unjustified prolonged hospital stays.
4. Complicating the hospital credit and collection practices in insured confinements in those instances where multiple coverage results in the submission of multiple

claim forms and overpayment of the hospital bill through the use of assignments.

5. Frequently providing greater benefits for procedures than are customarily charged by the physician or surgeon.
6. Diverting premium resources to purchase excess coverage when such resources might be used more effectively and economically to fill other needs in the insured's overall insurance program or other necessary living expenses.

A joint study group of the Health Insurance Association of America, Life Insurance Association of America, and the American Life Convention has evaluated the problem of "over-insurance" in detail, and has prepared a model anti-duplication provision for group medical expense plans, recommending usage by affiliated companies. The provision will permit the claimant up to 100 per cent reimbursement of his "allowable expenses," defined as "any necessary, reasonable and customary item of expense at least a portion of which is covered under at least one of the plans covering the person for whom the claim is made."

The effort is designed to hedge against an insured person making a "profit" by collecting in full under several group programs and /or individual health insurance policies. □

Brown Spider Bite

With Severe Hemolytic Phenomena

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DOCTOR RILEY: The case to be presented at today's rounds is an unusual and tragic one. We believe that it represents an example of necrotic arachnidism due to the bite of a brown recluse spider. Until relatively recently it was felt that the black widow spider was the only member of the spider family capable of causing serious in-

jury or disease in this country. In recent years reports from the Southwestern and Southeastern parts of the United States have indicated a particular type of brown spider, *Loxosceles reclusa*, is capable of causing severe illness. It is suggested that this entity may be more common than is generally supposed. This morning we would like to present a case which we have seen recently and to discuss several aspects of the problem.

Doctor McLean will present the case.

DOCTOR McLEAN: I.R., a 2⁴/₁₂-year-old Negro male, was admitted to the Children's Memorial Hospital with the chief complaint of dark urine. He had apparently been in his usual state of health until the morning of admission. On awakening he complained of cramping abdominal pain, refused breakfast and vomited a small amount of green material. He passed urine which is reported to have been normal in color. A short time later he became quite drowsy and went to sleep but would rouse periodically and ask for water. When his mother awakened him for lunch at noon, she noted a pinpoint lesion over his left shoulder surrounded by an area of swelling and tenderness which was thought to be an insect bite.

Approximately nine hours after onset of his first symptoms and two hours before admission, he passed dark brown urine and his parents noted for the first time periorbital edema, fever and unsteadiness on standing. He was taken to his family physician, who referred him to this hospital with the diagnosis of acute nephritis.

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Past history revealed that the patient was the result of a full term, normal pregnancy with an uncomplicated labor and delivery. He had enjoyed good health with no significant illnesses. Growth and development had been normal. During the past two or three months he had several bouts of impetigo resulting from infected insect bites.

Physical examination on admission revealed a well nourished Negro male child of the stated age who appeared to be quite ill. Temperature was 103° F., pulse 120 per minute, respirations 40 per minute, and blood pressure 120/60 mm Hg. He was quite lethargic and slept fitfully but could be aroused with questions or simple commands. Over the left scapula was an area of swelling approximately 8 x 10 cms. which was quite tender with increased local heat. In the center of this area was a puncture wound surrounded by a small vesicle. The mucus membranes were pale. Mild periorbital edema was present. Examination of the lungs, heart, and abdomen revealed no abnormalities. There were no other skin lesions or rash with the exception of healing, crusted impetiginous lesions over the lower extremities. Neurological examination was normal except for a very slight tremor on motion. The child was unsteady on standing erect, but this was thought to be due to generalized weakness.

Because of the history the urine was examined immediately. It was dark brown, contained numerous red cells, and tests for the presence of blood was strongly positive; determination of the hemoglobin content of the urine revealed it to be 4.1 grams per 100 ml. The hemogram revealed a hemoglobin of 6.4 grams per 100 ml., hematocrit 11 per cent, white cell count 110,000 per cubic millimeter with a differential count of 89 per cent neutrophils, and 11 per cent lymphocytes.

Because of the clinical findings and the laboratory evidence of a hemolytic phenomena, the possibility of necrotic arachnoidism due to a brown spider bite was considered and the parents were re-questioned. While they had originally disclaimed any possibility of spider bites, they did recall on questioning they had noted recently several "small brown" spiders around the house.

The child was placed in an oxygen tent and intravenous fluids were started. Serum

electrolytes, which had been obtained earlier, were reported to show a serum sodium of 133, potassium 4.9, chlorides 104, and CO₂ of 18 mEq/l. Blood urea nitrogen was 30 mgms per 100 ml. The child was given 100 ml of packed group O,Rh positive cells. An exchange transfusions was considered, but it was decided to withhold and to observe the child carefully for progress of the hemolytic process. During the next 12 hours, his condition was relatively stable. The blood pressure and vital signs remained stable and he became more alert. Urine output ranged between 15 and 50 ml. per hour, and the urine became lighter in color. However, the blood urea nitrogen approximately nine hours after admission had risen to 50 mgms. per 100 ml. Over the next six hours it was felt that the patient exhibited definite clinical improvement. The hematocrit rose from 11 per cent to 16 per cent and his urine output was increasing. Approximately 22 hours after admission, however, while preparing to give the patient an additional transfusion of packed cells, but before any had been administered, the child suddenly expired.

DOCTOR RILEY: I happened to walk in the laboratory that night shortly after the child was admitted and saw the urine specimen which was collected on arrival at the ward. The appearance suggested the urine seen following a snake-bite. We have saved a specimen of urine to demonstrate the striking appearance.

DOCTOR START: As you will note the urine is the color of a cola drink although the color is darker now than when first passed.

DOCTOR RILEY: An autopsy examination was done and the pertinent findings will be presented by Doctor Start.

DOCTOR START: Only the pertinent findings at necropsy will be reviewed. A small crusted lesion one cm. in diameter was noted over the left scapula. Extensive subcutaneous edema was present over the left scapula and extended anteriorly over the region of the left pectoralis muscle. The gross appearance of the lungs and heart was normal. The pleural and other serous cavities were essentially free of fluid. The kidneys showed a striking purplish discoloration which extended throughout the entire renal parenchyma obliterating the corticomedullary demarcation. The remainder of the

gross autopsy examination was not remarkable.

Microscopic examination of the lungs revealed areas of distended alveoli alternating with patchy areas of extensive edema. The myocardium was normal. The kidneys exhibited the most significant findings. Many of the Bowman's spaces and convoluted tubules and most of the collecting tubules contained a red brown material, which was watery to amorphous in consistency. This material had the appearance and staining characteristics of hemoglobin. Microscopic sections of the pectoralis major muscle showed marked edema but no evidence of inflammation or necrosis.

The final pathologic diagnosis was severe hemoglobinuric nephrosis and pulmonary edema. The findings in the skin and soft tissues on the left scapula were compatible with those previously described as due to the bite of the brown spider (*L. reclusa*).

DOCTOR RILEY: Are there any questions concerning the case? If not, I would like to introduce Mr. Horace W. Van Cleave, entomologist from Oklahoma State University, Stillwater, who was kind enough to get up very early to be with us for this morning's session.

MR. VAN CLEAVE: Thank you, Doctor Riley. Much of what I will say today comes from studies conducted in collaboration with and under the supervision of Doctor D. E. Howell, Professor and Head of the Department of Entomology, Oklahoma State University.

During the past five years considerable information concerning the brown spider *Loxosceles reclusa* G. & M. has been accumulated and the poisonous nature of its bite is now well recognized.

This spider is not new to Oklahoma but has been here for many years. It was reported in scientific literature as *Loxosceles rufescens* Banks until 1940 when Gertsch & Mulaik¹ recognized that two species were included in *L. rufescens* and demonstrated that the form found in the Central and Southwestern states was a new species which they named *Loxosceles reclusa*. Definite collection records in Oklahoma go back to 1928² but much earlier records are reported for Northern Texas.^{3, 4}

Loxosceles laeta Nicolet, a closely related species found in South America, was shown to have a toxic bite by Machiavello⁵ in 1934, but the role played by *L. reclusa* was not recognized until 1957 when Wingo and associates in Missouri demonstrated that its bite produced lesions approximating those caused by *L. laeta*. R. Bryan⁶ has indicated that the Choctaw Indians of Southwestern Oklahoma have regarded *L. reclusa* as a dangerous spider for over 50 years and are familiar with the symptomatology of the bite.

For many years scientific literature indicated that the black widow *Latrodectes mactans* was the only dangerous poisonous spider in the United States. Current information suggests that three closely related species of *Latrodectes*, two sack spiders, *Chiracanthium inclusum* (Hentz) and *C. diversum* Koch, and the brown spider *Loxosceles reclusa* must be considered capable of inflicting a dangerous or very painful bite. Only *Latrodectes Mactans* (Fab.), *Loxosceles reclusa*, and *Chiracanthium inclusum* have been collected in Oklahoma.

Adult brown spiders vary from seven to 13 mm. in length, the average is about nine mm. Males are usually slightly smaller than the females. Their color varies from light yellow to dark brown and the cephalothorax is usually lighter than the abdomen. The legs are long and well covered with short dark hairs. This slide will demonstrate the spider (figure 1).

Conspicuous recognition characters are the presence of three pairs of eyes arranged in a semicircle on the forepart of the head; a violin-shaped dark marking immediately behind the semicircle of eyes and a somewhat flattened carapace with a distinct short median groove. The immature stages closely resemble the adults except for size and often a slightly lighter color.

The eggs are deposited in off-white, round silken egg cases approximately eight mm. in diameter. These cases are found in sheltered dark areas in the spider's habitat. In summer young spiderlings emerge from the egg case in 24 to 36 days. However, they have hatched from the egg sometime earlier and molt once before leaving the egg case. The abandoned egg case contains the cast skins of the first instar spiderlings. From 41 to 50 spiders have been noted to emerge from the egg cases in our studies but unhatched

eggs and dead spiderlings remain in the cases. Development is relatively slow and is greatly influenced by weather conditions and the availability of food.

This spider prefers sheltered areas of reduced light where the organisms on which it preys can be found. They have been taken under stones, in hollow trees, in caves and under logs or similar areas. They apparently are well adapted to life in buildings and have been taken in all rooms in the home.

They may be found in barns, sheds, silos, corn cribs, schools, office buildings, hotels, warehouses and probably by careful searchings they could be found in almost any type of building within a few years after construction. Almost as many brown spiders were found on the top floor of a large building as on the bottom floor. Our data indicate that older buildings are usually more heavily infested but spiders have been found in buildings less than six months old.

The webs of brown spiders are not well formed but resemble a loose tangle of silk with no definite pattern.

During the day the spiders are found in sheltered areas but at night they wander widely and may be found in the center of a room. They hide quickly when exposed to white light but may be observed more easily under a red light.

While the spiders are very timid and not aggressive toward humans, they quickly and efficiently catch and kill insects much larger than they are. Houseflies may be captured and bitten in a second or two and within 30 seconds the fly is almost completely immobilized. Unlike many spiders, they usually make no attempt to hold their prey after biting but step back and wait until the struggle is over. One half-grown spider caught and killed four houseflies in less than three minutes.

Brown spiders kill many undesirable insects and can quickly kill cockroaches many times their size. Probably most of their hunting is done at night when it usually goes unnoticed. This greatly expanded nighttime habitat may explain bites incurred outside the spider's daytime haunts. It is unfortunate that such a useful spider also has a toxic bite.

Relatively little information is available on control measures. Anything that reduces the number of hiding places and the avail-



Figure 1. *Loxosceles reclusus*.

ability of food will aid in control. Intensive hunting and crushing particularly at night, using a red light, will provide some control but chemicals are usually needed to eliminate a large population in a building.

Many insecticides will kill the spiders if they can be applied so that the spider is directly contacted. Because of their habits this is often difficult. Laboratory studies with a large series of common insecticides indicated that in low concentration only DDVP (Vapona) killed spiders which were not struck by spray droplets without coming in direct contact either directly or by walking over the treated surfaces.

To determine the effectiveness of large scale applications by thermal aerosol generators (Dynafoe Jr.)* rooms in two large dormitories were treated with one of the following amounts of 90 per cent (Vapona) fogging formulations: 0.033, 0.067, or 0.10 ml. per cubic foot. The particle size diameters ranged from 1.0 to 30.0 microns with a few particles exceeding 60 microns.

Two days later the rooms were carefully

*Curtis Automotive Devices, (Model No. CFR-11500B) Westfield, Indiana.

searched with a red light to determine the number of live and dead brown spiders. All spiders found in the rooms receiving 0.067 or 0.10 ml./cu. ft. were dead. Approximately 50 per cent of the spiders in rooms treated with 0.033 ml./cu. ft. were alive. From zero to four spiders were found in a dormitory room and closets; the average was 0.41. Minor softening of the wax covering the floors was noted in a few of the rooms "fogged" with DDVP, particularly where the large particles fell to the floor.

Fumigation with methyl bromide at two pounds per 1000 cu. ft. failed to kill all spiders. Rooms treated with DDT, methoxychlor or DDD at a rate of one gallon of 2.0 per cent spray/1000 sq. ft. were not freed of spiders.

DOCTOR RILEY: Thank you very much for your interesting remarks. It is quite obvious that you, Doctor Howell, and your associates have accumulated a great deal of valuable information on this family of insects. Are there any questions of Mr. Van Cleave?

DOCTOR GARRISON: I believe you mentioned there are three poisonous spiders in Oklahoma. Would you elaborate on this?

DOCTOR RILEY: You heard Mr. Van Cleave mention that "Bryan has indicated that the Choctaw Indians in Oklahoma have regarded the brown spider as dangerous for over 50 years." The "Bryan" he referred to is Mr. Richard Bryan, Research Assistant in The Department of Entomology at Oklahoma State University.

We are fortunate in having him here with us today and I would like to ask him to comment on Doctor Garrison's question.

MR. BRYAN: Three poisonous spiders are found in Oklahoma, the black widow, *Latrodectes mactans*, the brown spider *Loxosceles reclusa*, and a sack spider *Chiracanthium inclusum*. The poisonous nature of the bite of the brown spider has recently been recognized but the spider has been in the central and southwestern states for many years. As Mr. Van Cleave mentioned, brown spiders are found in secluded areas of many homes, commercial buildings, schools and churches in many parts of Oklahoma. The most effective control measures developed

include removal of favored hiding areas and "fogging" with DDVP (Vapona).

DOCTOR RILEY: Thank you, Mr. Bryan. I would like to call on Doctor Ben Nicholson to comment on some of the clinical aspects of this problem. He has been interested in this problem for sometime and, as a matter of fact, is the author of an article on necrotic arachnidism.⁷

DOCTOR BEN H. NICHOLSON: There is no question about the brown spider, *Loxosceles reclusus*, being responsible for a bite in the human which will produce intense long lasting pain and will be followed by devitalization and necrosis of the affected area. In one of our patients the slough was large enough that the area required a skin graft. The degree of devitalization depends on how long the spider bites and whether or not it has recently bitten enough insects to decrease its supply of venom. I would like to show this slide which demonstrates the skin lesion 36 hours following the spider bite (figure 2).

The evidence, however, for the bite of the brown spider being responsible for acute hemolytic anemia is largely circumstantial but, nevertheless, convincing. Against acute hemolytic anemia occurring as a result of the bite of the brown spider are:

1. It has not been identified as the villain in bites followed by hemolysis but has in necrotic arachnidism.
2. South American workers have been unable to produce hemolysis with the venom of *Loxosceles laeta* either *in vitro* or *vivo*, although ten per cent of the patients bitten by the spider in South America are reported to have some degree of intravascular hemolysis.
3. Bill Denny, one of our graduates who is working on this problem at the Veteran's Hospital in Little Rock, tells me that he has been unable to produce hemolysis with the venom of the *L. reclusus* but he either told me, or someone did, that he has been able to demonstrate hemolysis using an extract of the crushed cephalothorax.

The strongest evidence in favor of *L. reclusus* being responsible is that those who survive the hemolytic crisis have the typical necrotic lesion which characterized the bite of *L. reclusus*. One has only then to consider that an individual host factor is necessary to complete the picture. This we know to be

true in the hemolytic picture of primaquine sensitivity and perhaps it could be true here.

As for treatment, Denny has shown in experimental animals that steroids injected locally or given systemically will decrease the toxic effect of the venom. The problem then is to be aware of this and to see the patient before the damage has been done. I believe that the early appearance of the wound would not be as important in making the diagnosis of a brown spider bite as would the disproportionate intensity of the pain.

DOCTOR SAPPER: I take it from what you say that a prominent feature is the severe pain and that not all of the cases are accompanied by a hemolytic phenomenon.

DOCTOR BEN NICHOLSON: That is correct. The pain is out of proportion to the extent of the area involved by the puncture wound or bite in individuals old enough to relate it. Fortunately, only a minority of the cases have a complicating hemolytic anemia.

DOCTOR RILEY: We are pleased to have with us today Doctor John Nicholson by way of Vanderbilt and Babies Hospital, Columbia University. While a pediatric house officer at Vanderbilt University Hospital, I believe you had a case of brown spider bite with severe hemolysis. Will you comment from your experience on the case which was presented today.

DOCTOR JOHN NICHOLSON: I would like to make a few comments regarding therapy. While exchange transfusion was dramatically successful in our case at Vanderbilt, such therapy is hazardous and should be used with caution. Its primary object is to prevent hemoglobinuric nephrosis, which, as has been shown in dogs, is a function not only of the hemoglobinuria, but also of renal ischemia. The two together produce acute renal failure in a situation where neither one alone has such an effect. In humans, we know that acute renal failure very frequently accompanies hemolytic transfusions reaction, which likewise is frequently associated with vascular collapse; however, renal failure is much less common following paroxysmal nocturnal hemoglobinuria, a condition in which shock is much less frequent. With these considerations we would reserve exchange transfusion for cases in which circulatory stability seems jeopardized or in which the massiveness of the hemolytic pro-



Figure 2. Appearance of the skin lesion 36 hours following bite of *L. reclusus*.

cess itself appears to interfere with the oxygen carrying capacity of the blood.

DOCTOR RILEY: Do you have any comments on the management of our case?

DOCTOR JOHN NICHOLSON: I would agree with the decision to withhold exchange transfusion since the hemolytic process appeared to have stabilized.

DOCTOR RILEY: Are there any further questions or comments? If not, I would like to thank all of the participants for their contributions to the discussion. □

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ABSTRACTS

EMOTIONAL FACTORS IN CORONARY DISEASE

M. E. Groover, Jr., M.D. The Journal of the Arkansas Medical Society, Aug., 1963.

One hundred eighty-seven executives were followed over a period of greater than five years and had a minimum of six blood analyses each year for blood lipids. Sixteen of these men had myocardial infarctions during this period. These 16 who had infarctions were found to have more labile serum lipid values than those who did not have myocardial infarctions, to have in general a higher blood cholesterol value and usually a rising or high cholesterol value immediately preceding their myocardial infarction. Other studies that seemed to correlate with the hazard of having myocardial infarctions were the electrophoretic mobility of a Beta Lipoprotein fraction of the serum and the appearance of a lipid mobilizer factor in the blood. Changes in the above tests were also noted to be associated with stress periods in the lives of these executives. Other work was also cited describing atherosclerosis and myocardial infarction being produced experimentally in animals implicating neurogenic mechanisms.

SOCIAL INTERACTION AND PHYSIOLOGIC CHANGE

W. W. Schottstaedt, Bulletin of the Menninger Clinic, 27: 291-299, Nov., 1963.

The author has for some time been interested in and reported on metabolic deviations associated with emotional states. This paper reports observations made on patients and groups on metabolic balance studies.

A case of a young woman with premenstrual tension and rage reactions was studied by means of urinary electrolyte and water excretion. This patient's excretion rates of electrolytes and water were apparently affected by the person with whom she was interacting. Rejection by a fellow employee and rejection by her boss were associated with different excretion patterns. Opposite excretion patterns were obtained when the patient contemplated the same event in two different circumstances.

Experiences on a metabolic ward are noted by the author. It was found that less than half of the stressful events were associated with significant metabolic changes when the ward was calm. This compared to 86 per cent significant metabolic deviations during stressful events when the ward was disturbed. Changes in status among the patients were accompanied by metabolic changes. An anxiety situation among the nurses that was unknown to the patients caused changes in electrolyte excretion and exacerbation of symptoms on the entire ward.

In general anger and anxiety are associated with increased water and sodium excretion with sodium excretion being more marked in the former. Tension

and depression tend to be associated with decreased water and sodium excretion while the necessity to exercise conscious control over emotional states is frequently manifested by an increase in potassium excretion.

EDITOR'S NOTE: These observations are important both to studies utilizing metabolic balances and to treatment of conditions where sodium, potassium and water excretion are important. Congestive heart failure, cirrhosis and nephrosis come to mind immediately.

EXPERIMENTAL INDUCTION OF ENDOMETRIOSIS ACROSS MILLIPORE FILTERS

James A. Merrill, M.D., Surgical Forum 14: 397, 1963.

The author has shown that the lesions of endometriosis can be produced without direct implantation of endometrium. In rabbits endometrium was placed within Millipore filters and deposited in the pelvic peritoneum, between the leaves of the broad ligament, and within the subcutaneous tissue. The Millipore filters do not allow passage of cellular material. Direct implantation of endometrial cells was thus made impossible. After periods ranging from four to ten weeks, definite histologic endometriosis was seen adjacent to the intact Millipore filter chambers in the broad ligament. The endometrium within the chamber was infarcted. This experiment lends support to the coelomic metaplasia theory of endometriosis.

RECENT PUBLICATIONS

The Journal welcomes the opportunity to list current publications by any Oklahoma physician.

Electric Computers in Public Health, Edward Brandt Jr., and Margaret Shackelford, M.S. Okla. Journal of Public Health, Vol. 7, 2, Oct., 1963.

Anatomy as Applied to Clinical Medicine, Ernest Lachman, M.D., The New Physician, 12: 418-421, Oct., 1963.

Desalting by High Voltage Electrophoresis, Hsiu-Ying T. Yang, and M. R. Shetlar, Analytical Chemistry, 35: 2224, 1963.

Estimation of Serum Proteins by Physical Chemical Measurements, Manual of Procedures for the Applied Seminar on the Serum Proteins and the Dysproteinemias, K. M. Dubowski, Philadelphia Assoc. of Clin. Scientists, pp. V-1-18, 1963.

a-Galactosidase from *Diplococcus pneumoniae*, Yu-Teh Li, Su-Chen Li and M. R. Shetlar, Arch. Biochem. and Biophys., 103, 436, 1963.

Reprints of most of the above publications are usually available on request from the senior author, c/o Mrs. Joan Campbell, Veterans Administration Hospital, 921 N.E. 13th Street, Oklahoma City, Oklahoma.

Pyelonephritis and Hypertension

PAXTON HOWARD, M.D.*
HARRIS D. RILEY, JR., M.D.**

AN ASSOCIATION between pyelonephritis and hypertension has been observed repeatedly. However, the exact etiological relationship between two such prevalent disorders each possessing a wide range of diverse clinical and pathologic manifestations is difficult to define.

Pyelonephritis and its complications are a major problem in preventive medicine. That pyelonephritis beginning in infancy and childhood has the same potential for chronicity and complications as does the disease when it starts in adult life has been shown by studies at the Children's Memorial Hospital in Oklahoma City and elsewhere. Longcope and Winkenwerder (1933) described a series of patients with bilateral non-obstructive pyelonephritis which had progressed to renal insufficiency with intermittent or persistent hypertension. They postulated the onset as pyelonephritis of infancy with insidious progression during pregnancy or early adult life with or without acute flare-ups to produce the contracted kidneys found at autopsy. Weiss and Parker (1939) pointed out the relationship of obliterative vascular lesions in the kidney to hypertension. Subsequently, a high incidence of hypertension was noted among patients with pyelonephritis secondary to urinary tract anomalies, obstruction, calculi or instrumentation. There can be little question that hypertension can be produced by advanced renal infection.

Studies in experimental animals have demonstrated that hypertension induced by

mineralocorticoid administration renders the kidney more susceptible to experimental pyelonephritis (Woods, 1960). Accordingly, some investigators have suggested that essential hypertension predisposes to renal infection which in turn aggravates the hypertension producing a vicious cycle.

The recent development of practical methods to quantitate the number of bacteria in the urine, to collect satisfactory urine specimens without catheterization in females, and of renal biopsy has renewed interest in the relationship of hypertension and chronic pyelonephritis (Kass; Riley). Before these techniques were available only 20 to 30 per cent of autopsy-proved cases of pyelonephritis were diagnosed during life. Several recent studies have demonstrated that significant bacteriuria (greater than 100,000 colonies per ml. of urine) signifies active renal infection and occurs more frequently among hypertensive patients than among normotensive controls. In extensive investigations in ambulatory population groups Kass (1962) found evidence to support the hypothesis that bacteriuria occurs independent of and leads to hypertension.

There is general agreement that pyelonephritis intensifies the disease in patients who are otherwise predisposed to hypertension by genetic, familial, environmental, or yet undetermined factors. Until the significance of the relationship of pyelonephritis and hypertension is clarified, it is suggested that the physician should make a concerted effort to attack the problem of pyelonephritis as a possible means of preventing hypertension. Approaches to this include the search for and vigorous treatment of significant bacteriuria whether symptomatic or not, and the avoidance of injudicious instrumentation of the urinary tract.—*Edited by Harris D. Riley, Jr., M.D.* □

From the Department of Pediatrics, and the Children's Memorial Hospital, University of Oklahoma School of Medicine, Oklahoma City, Oklahoma. Studies supported in part by Training Grant TI-AM 5343-02 from The National Institute of Child Health and Human Development, U. S. Public Health Service.

*Epidemic Intelligence Officer, Communicable Disease Center, U.S.P.H.S. assigned to Department of Pediatrics, Children's Memorial Hospital, University of Oklahoma Medical Center. Research Fellow in Pediatrics, University of Oklahoma School of Medicine.

**Professor of Pediatrics, University of Oklahoma School of Medicine.

Dean's Message

Before the Oklahoma State Medical Association Financial Aid to Medical Education program was initiated in 1962, there was no continuing source of scholarship funds for promising and deserving candidates for admission to the University of Oklahoma School of Medicine.

Since that time an increasing number of physicians have become concerned with the problem of securing the most able future physicians in the face of competition from other medical schools and other scientific disciplines. They have responded generously by establishing additional loan and scholarship funds.

As a result, this year the Board of Admissions for the first time is able to offer some scholarships at the time of the admissions interview to applicants who show exceptional ability, motivation and potential. We have been in a position to outbid other institutions, whereas, in the past, our school on occasion has lost outstanding candidates who stated that they preferred this school but, through financial necessity, had to choose an institution that provided a scholarship program.

The OSMA this fall will make its third annual award of \$500 tuition scholarships to five first year students. Four new first year scholarships will be awarded this year also. They were recently made available by gifts from the Oklahoma City Clinic, by neurosurgeons and neurologists in Oklahoma City who created the Harry Wilkins Scholarship Fund, and by another group of Oklahoma City physicians who established a

Mark R. Everett Scholarship Fund in lieu of sending conventional Christmas cards.

These additional funds increase the number of first year scholarships to be awarded in 1964 to a record total of 20, including ten from the Avalon Foundation grant and one from the Oklahoma City Allergy Clinic-Ray M. Balyeat, M.D., Memorial Scholarship fund.

However, the Avalon Foundation grant will be exhausted within two years and unless additional scholarships are established the admission board's power to bargain for top talent will decline.

Other liberal contributions during the past year have bolstered the medical student loan funds. The Hughes-Seminole County Medical Society gave \$4,500 to launch a fund for students in the second year or beyond. A Student Emergency Loan Fund to provide small, short-term loans was set up by the Women's Auxiliary to the Oklahoma SAMA chapter.

Even with these fine developments in the loan and first year scholarship program, there remains a need for nonrefundable scholarships to help the capable and financially distressed student beyond the first year of medical school. At present there is only one such scholarship, provided by one of the pharmaceutical companies.

Establishment of scholarships by individuals or groups of physicians is indeed a heartening trend and the physicians of our state are to be commended for their action. It is truly a contribution to the future of medicine. □

Mark R. Everett

OSMA Life Insurance Program Tops Competing Plans

A new group term life insurance program for association members was inaugurated on April 1st by the OSMA Council on Insurance. Underwritten by the Massachusetts Mutual Life Insurance Company, the new plan offers basic changes and improvements over the existing OSMA life program, and is now considered as the most economical, broad-benefit term life insurance protection available to Oklahoma physicians from any source.

The new program provides for a level annual premium of \$125.00 and high death benefits at the younger ages, gradually decreasing as the insured grows older. Formerly, the OSMA-approved Massachusetts Mutual program (since 1956) provided a level death benefit up to age 60 and markedly increasing premiums.

Since the inception of the OSMA relationship with Massachusetts Mutual, death claims have been paid in the amount of \$595,000.

Under the new plan, death benefits range from \$33,125 at age 25, to \$21,625 at age 40, to \$2,250 at age 69. A full schedule of death benefits appears with this article.

A Purpose For Group Term

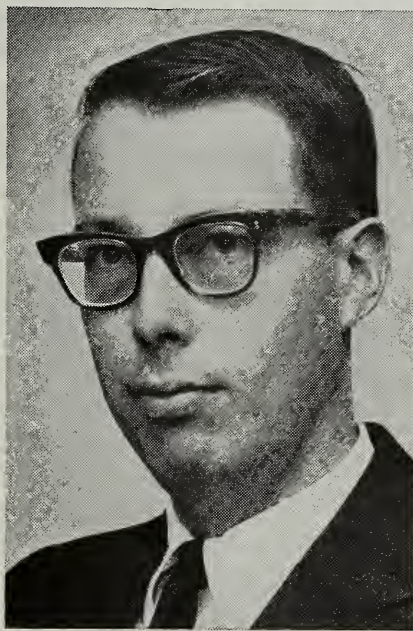
Through the mass purchasing power of the hundreds of OSMA members enrolled in the program, low-cost life protection is provided at virtually wholesale rates, which are not possible in individual policies or in other medical group programs. Although term insurance does not accumulate cash value, there are many advantages offered which should be seriously considered by the majority of physicians.

The OSMA term insurance plan economically "fills the gap" which might be present in the physician's portfolio of permanent life insurance. In addition, it is ideal for mortgage liquidation, educational obligations, or survivors needs.

Since the program is written on a true group basis and administered locally by Oklahoma City insurance agent, Walter C. Wilson, Charter Life Underwriter, the Oklahoma State Medical Association's Council on Insurance exercises unusual control in the management of the plan.

Unlike other medical association sponsored programs, the master contract of the OSMA plan provides that all surplus funds are returned to the participants, either in the form of cash dividends, premium credits or expanded benefits. The president, president-elect and executive secretary of the OSMA are trustees of the funds.

In 1962 and 1963, five per cent dividends were distributed to all par-



WALTER C. WILSON

Walter C. Wilson, C. L. U., is co-general agent of the Wilson & Wilson, Inc., general agency of the Massachusetts Mutual Life Insurance Company in Oklahoma City. Mr. Wilson is administrator for the Oklahoma State Medical Association Insurance Trust. He is a native of Oklahoma City and graduated from Dartmouth College.

ticipants in the form of premium credits.

Extra Benefits Offered

In addition to the liberal life insurance protection provided by OSMA term life policies, four other valuable benefits are included:

Double indemnity in the event of accidental death.

Triple indemnity in the event of death while a passenger on a common carrier.

Waiver of premium in the event of disability through accident or illness.

Dismemberment and loss of sight coverage.

The OSMA program stands completely apart from competing medical association plans in providing the above benefits. Other plans routinely offer only the basic death benefit and waiver of premium, excluding accidental death coverage, and dismemberment and loss of sight benefits.

In addition, the unique Massachusetts Mutual policy contract provides a variety of guarantees which are not generally available to group insurance policyholders.

A few of these guarantees are as follows:

Full aviation coverage, regardless of flying experience or status.

All settlement options of the company are provided, so the OSMA program may be coordinated with other personal life insurance.

Liberal conversion privileges are included.

On the latter point, as a physician's term life coverage decreases each year, he is guaranteed the privilege of choosing any type of permanent individual policy then being issued by Massachusetts Mutual in an amount equal to the loss of coverage. No evidence of insurability is re-

quired, and the premium cost will be based upon the plan of insurance selected, and age at the time of conversion.

If a policyholder terminates his OSMA membership, he may convert the entire amount of his term policy to permanent insurance without evidence of insurability.

A Comparison

OSMA's program compares very favorably with the offerings of other medical society programs which are commonly available to Oklahoma physicians.

The OSMA Council on Insurance made a detailed study of selected competing plans, which reveals the true value of the OSMA program and illustrates the exceedingly broad coverage afforded to members of the association.

For example, the term life insurance programs offered by the South-

ern Medical Association, American Academy of General Practice, and the American Society of Abdominal Surgeons are compared below to the benefits and costs of the OSMA plan.

Enroll Now

Applications are now being accepted for OSMA group term life insurance. Physicians are encouraged to contact Mr. Walter C. Wilson, C.L.U., Administrator, 1280 First National Building, Oklahoma City, Oklahoma.

Upon receipt of the application form and remittance, the insurance protection is in force. However, if a physical impairment is indicated, Massachusetts Mutual reserves the right to request a physical examination.

Take advantage of a low-cost insurance program, a liberal policy contract, and unique additional benefits. The program is designed and regulated by the OSMA Council on Insurance for the benefit of association members. □

COMPARISON TO SELECTED LIFE INSURANCE PROGRAMS

BENEFIT	OSMA	SMA	AAGP	SUR- GEONS
Waiver of Premium?	Yes	Yes	Yes	Yes
Accidental Death Benefits?	Yes	No	No	No
Triple Indemnity?	Yes	No	No	No
Right to Convert?	Yes	No	No	No
Dismemberment, Loss of Sight?	Yes	No	No	No
Cost per \$1,000 of Death Benefit, Age 40?	\$5.78*	\$7.20	\$4.52	\$4.80

*If the OSMA did not offer the liberal benefits noted above, the cost per \$1,000 would be \$4.58. In addition, there is no charge for the right to convert, aviation coverage and settlement options, none of which are included in competing plans.

Rates And Coverages

If Death Occurs At Age	Plan Pays This Amount of Coverage
25	\$33,125
26	32,750
27	32,625
28	32,375
29	32,000
30	31,750
31	31,250
32	30,750
33	29,875
34	29,125
35	28,125
36	26,875
37	25,625
38	24,375
39	22,875
40	21,625
41	20,250
42	18,875
43	17,500
44	16,375
45	15,250
46	14,125
47	13,125
48	12,125
49	11,250
50	10,375
51	9,500
52	8,750
53	8,125
54	7,500
55	6,875
56	6,375
57	5,875
58	5,375
59	5,000
60	4,625
61	4,250
62	4,000
63	3,625
64	3,375
65	3,125
66	2,875
67	2,625
68	2,375
69	2,250

ARE YOU FAMILIAR WITH THE NEW OSMA GROUP LIFE INSURANCE PROGRAM?

The Council on Insurance is happy to announce a new Group Term Life Insurance Program. Your Council has made an extensive study of other association group life insurance programs, and we now offer the lowest cost association program available today.

Massachusetts Mutual Life Insurance Company

Walter C. Wilson, C.L.U., Administrator
1280 First National Building
Oklahoma City, Oklahoma



Your cost
regardless
of age

\$125.00

DOCTOR, WHAT WILL YOU EARN?

It depends, of course, on your age and annual earnings, but the amount can quite reasonably exceed \$400,000.

The total value of all your possessions—property, savings, cars and personal belongings—is only a fraction of what you will probably earn during years of practice. And yet some of you have insured these things and left your earning power unprotected.

Is this logical? Not when you can participate in the . . .

O.S.M.A. GROUP DISABILITY INCOME PROGRAM

- Now Available to members of the OKLAHOMA STATE MEDICAL ASSOCIATION
- ... gives you individual coverage at low group rates.
- ... offers flexible waiting periods at your option.
- ... guarantees you an income when you are disabled from an accident or sickness.
- ... offers optional Indemnity from \$200.00 to \$800.00 per month.
- ... pays for lifetime on accident and up to age 65 on sickness.

For Additional Information, call or write

Robert O. Bowles or Rodman A. Frates
C. L. FRATES & COMPANY, INC.

720 N.W. 50th St. P. O. Box 18735
OKLAHOMA CITY, OKLAHOMA 73118
Telephone Victor 2-1431

OSMA Disability Insurance Is National Pacesetter

One out of five physicians will experience a disability of at least two weeks' duration within the next two months, according to statistics of national averages.

Most physicians can ill afford to be without a good disability income insurance program. Although well protected by real property, automobile and personal property insurance, many physicians fail to adequately guard their most valuable asset—their *earning power*.

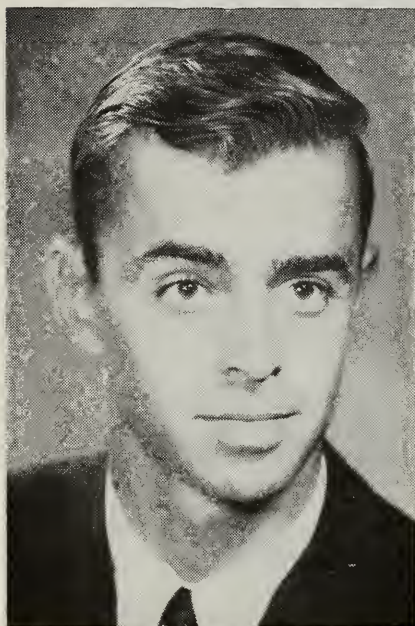
The potential lifetime earnings of a physician can usually be measured in hundreds of thousands of dollars, yet in most cases, income would

soon cease in the event of disabling illness or accident.

Under the OSMA Disability Income Insurance program, Oklahoma physicians are offered the most comprehensive and flexible plan available to physicians anywhere.

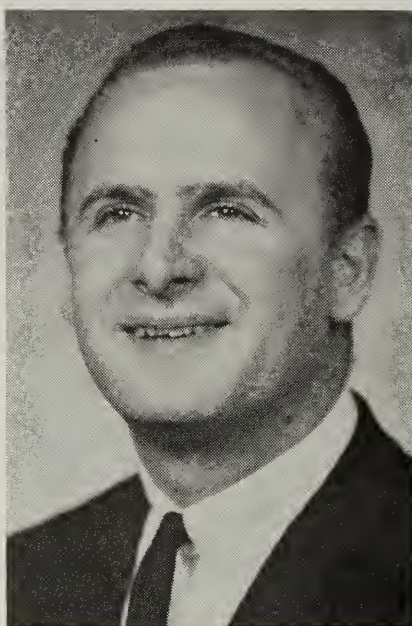
Program Improved

In 1964, major improvements were made in the disability insurance plan which is underwritten by the Insurance Company of North America and administered for the association by C. L. Frates and Company, Oklahoma City insurance agency.



RODMAN A. FRATES

President of C. L. Frates & Company, Inc. Graduated from Dartmouth College and attended the University of Virginia Law School. Mr. Frates has also attended numerous insurance seminars and completed a number of special insurance courses. Has worked closely with the insurance committee and administrative offices of the Oklahoma State Medical Association since being appointed administrator for the group accident and health insurance program.



ROBERT O. BOWLES

Manager of the Life Insurance Department of C. L. Frates & Company, Inc. Received his formal education at the University of Oklahoma, has attended numerous insurance seminars and was employed for home office training in Boston, Massachusetts. Presently studying toward the professional designation of Charter Life Underwriter (CLU). Has worked closely with the Oklahoma State Medical Association insurance program since 1961.

The expanded program enables physicians with proven insurability to obtain up to \$800.00 a month indemnity, payable for lifetime for disabilities due to accident, and extending up to age 65 in the case of illness.

The new benefits, brought about by excellent loss experience in the group program, are simply additions to the former schedule of benefits and options. Under the former plan, doctors could select from \$200.00 to \$600.00 monthly indemnity benefits, payable for lifetime on accidents and for either three or five years on illness. Now, the monthly indemnity payment can be carried up to \$800.00, and the pay period in the case of illness may be carried to age 65.

New OSMA members may obtain at least \$200.00 a month benefits without evidence of insurability, as long as they apply within sixty days after acceptance to membership. Other coverages are based upon proven insurability.

Waiting periods under any of the benefit options range from nil on accident and seven days on illness, to 180 days for both accident and illness. The policies provide \$5,000.00 in accidental death and dismemberment benefits, plus benefits for partial disability due to accidents. Another option provides \$15.00 a day for hospital benefits for a period of up to 120 days.

Strong Company, Agent

The Insurance Company of North America has reserves in excess of one and one-half billion dollars, and enjoys the top financial and service ratings in the industry. Excellent claim service is available in Oklahoma, from which state physicians participating in the OSMA plan have received over \$130,000 in benefits since the inception of the program in 1961.

C. L. Frates and Company has more than fifty years' experience in the casualty insurance business, and now maintains offices in Oklahoma City, Tulsa, Muskogee, Ardmore, Altus and Guthrie. The agency has assumed direct responsibility for

assuring excellent claims service, diligent enrollment service, and individual insurance counselling for OSMA members.

Low Cost, Liberal Benefits

Since the new, improved OSMA Disability Income Insurance program offers optional waiting periods and disability payments to age 65 for illness and for lifetime on accidents, it is definitely more comprehensive than plans promoted by other medical societies. Moreover, the top monthly benefit of \$800.00 compares favorably with the top-limit program offered by the American Medical Association, but does not have the AMA disadvantage of a mandatory one-year

waiting period before benefits begin. It is reported that 98 per cent of all disability claims terminate within the first year. As a case in point, in the last four years of Oklahoma experience, only three disability claims have lasted longer than one year.

Thus, it may be said that few physicians will benefit from a "catastrophic" program which requires a waiting period of one year.

Other medical society plans available to Oklahoma physicians offer comparable benefits to the OSMA program at higher costs (5-12 per cent higher), but do not have a pay period to age 65 in the case of illness.

The OSMA-approved program is absolutely the most economical pro-

gram of its type, and is a match for any regional or national program in the type and quality of benefits offered.

Overhead Expense Package

C. L. Frates also offers OSMA members a companion insurance program to indemnify physicians against the costs of maintaining their offices during periods of disability.

Up to \$1,000.00 a month insurance protection is available for payment of necessary office expenses, such as fees for substitute practitioners, employees' salaries, utilities, rent and other ordinary business expenses.

Optional waiting periods for benefits to begin following disability due

THE NEW PLAN* ANNUAL PREMIUMS

Accident Benefit Period: Lifetime • Sickness Benefit Period: TO AGE 65

MONTHLY INDEMNITY		Under Age 40	Age 40 thru 44	Age 45 thru 49	Age 50 thru 54	Age 55 thru 59	Age 60 thru 64	Age 65 thru 69
A	Accident Waiting Period: 0 Days				Sickness Waiting Period: 7 Days			
	\$200	\$ 79	\$ 95	\$103	\$124	\$132	\$118	\$127
	300	116	140	152	183	195	174	187
	400	152	184	200	242	258	229	248
	500	189	229	249	301	321	285	308
	600	225	273	297	360	384	341	368
	700	262	318	346	419	447	397	428
	800	298	362	394	478	510	453	488
B	Accident Waiting Period: 30 Days				Sickness Waiting Period: 30 Days			
	200	64	77	84	100	107	102	109
	300	93	113	123	147	158	149	160
	400	122	148	162	194	208	197	211
	500	151	184	201	241	259	244	262
	600	180	219	240	288	309	292	313
	700	209	255	279	335	360	339	364
	800	238	290	318	382	410	387	415
C	Accident Waiting Period: 180 Days				Sickness Waiting Period: 180 Days			
	200	54	64	69	83	88	80	85
	300	78	93	101	122	129	117	125
	400	102	122	132	160	170	154	164
	500	126	151	164	199	211	191	204
	600	150	180	195	237	252	227	243
	700	174	209	227	276	293	264	283
	800	198	238	258	314	334	301	312

*Your Oklahoma State Medical Association Group Insurance Program is now offering this additional plan. This plan affords you lifetime accident benefits and sickness benefits to age 65. If you are presently participating in the group program you may keep your old plan at correspondingly lower rates than printed above, or apply for the preceding high limit options. New proof of insurability will be required to obtain the new plan.

to accident or illness are 15 days or 30 days. Benefits are payable for periods up to 18 months, or about one-third longer than most competitive plans.

The OSMA Overhead Expense Program is underwritten by the Continental Casualty Insurance Company, the largest and most experienced underwriter of association group insurance in the world.

Enroll Now

OSMA Disability Insurance and Overhead Expense Insurance may be obtained upon application to the C. L. Frates and Company, Inc., 720 N.W. 50th Street, Oklahoma City.

The OSMA Council on Insurance strongly urges protection against the hazard of disability, and recommends the OSMA plans as the best available to Oklahoma physicians. □

Highlights of Annual AMA Convention

The AMA Council on Postgraduate Programs announced that the scientific program for the 113th Annual Convention in San Francisco, June 21-25 is virtually complete, and that an attendance of between 15,000 and 16,000 physicians is anticipated.

When the AMA held its last convention in San Francisco, June, 1958, the total physician registration was 13,997.

Doctor J. Arnold Bargen, Temple, Texas, chairman of the Council on Postgraduate Programs, which plans the scientific programs for the Association's two conventions, the annual and clinical, said that the San Francisco program will be most comprehensive, including lectures, scientific exhibits, preview showings of medical films, and color television.

"The combined efforts of many people, particularly the section secretaries, have helped to formulate a program that will be an outstanding contribution to graduate medical education," Doctor Bargen said.

Doctor John Hickam, Indianapolis, chairman of the program planning committee of the Council, said that

the following general scientific meetings have already been coordinated by section secretaries:

Differential Diagnosis of the Liver and Pancreas; Hyperbaric Oxygen Phenomena; Computers in Medicine; Autoimmune Mechanisms and Disease; Cardiovascular Opacification; and Tumors of the Endocrine Function.

In addition, a special half-day program on various aspects of heart disease will be offered by the American College of Cardiology and the American Heart Association.

The popular and interesting Research Forum program, under the chairmanship of Doctor Edwin H. Ellison, Milwaukee, will be offered again at the San Francisco meeting. Sixty papers, based on new and original work being done in the nation's medical schools, will be delivered by young, outstanding researchers. In contrast to previous forums, one or two major areas of research, possibly organ transplantation and hyperbaric oxygen in the treatment of disease, will be covered in a symposium presentation.

Much Interest in Program

A general scientific meeting program that has already elicited considerable interest is the half-day session on Hyperbaric Oxygen Phenomena—the science of administering oxygen at super atmospheric pressure.

Principal investigator of hyperbaric research is Doctor Claude R. Hitchcock, chief of surgery at Minneapolis General Hospital and professor of surgery at the University of Minnesota. He and three other Minneapolis surgeons—John J. Haglin, Russell H. Harris and Frank E. Johnson—as well as other researchers throughout the country, were attracted to hyperbaric therapy by two articles appearing in *Surgery* in March, 1961. The author was Doctor I. Boerema of Amsterdam, Netherlands, whose human-size hyperbaric chamber has been in use since 1959.

Doctor Kenneth K. Keown, anesthesiologist from the University of Missouri Medical Center at Colum-

bia, who is serving as the coordinating secretary for the hyperbaric program, has plans underway to bring Doctor Boerema to the San Francisco convention.

At the present time, research uses for the hyperbaric chamber are many. Applications where research is expected to be highly productive include acute coronary occlusion, acute carotid artery occlusion, acute intracerebral vascular occlusion, acute cerebral hemorrhage with rupture of berry aneurysm, irradiation, traumatic shock, pulmonary edema and cardiac defect surgery.

Sections Offer Programs

All of the 21 Sections, representing various specialties in medicine, are formulating interesting and educational programs for the San Francisco Convention. Subjects include toxicants and insecticides, chronic ulcerative colitis, psychiatry in general practice, gynecology for the general practitioner, ecology to closed environments (submarines and space craft), basic courses in hand surgery and common foot problems, prosthetics, differential diagnosis of the liver and pancreas, management of lower extremity amputees in the light of recent research, procedures for the treatment of anorectal diseases, and contamination and infection of the bladder and kidney.

San Francisco's Civic Auditorium has been completely modernized at a cost of more than seven million dollars and will be ready for the AMA convention in June.

San Francisco, in keeping with its attractiveness as a vacation and convention center, has increased its housing capacity since the AMA last met in the Pacific coast city six years ago. Several major new hotels have been constructed, existing ones have greatly expanded their accommodations, and hundreds of fine motels now encircle the entire bay area. Complete forms for hotel reservations, as well as for advance convention registration, appear periodically in all AMA publications. Check the convention issue, J.A.M.A., May 9th, for details. □

Oklahoma State Medical Association

COUNTY MEDICAL SOCIETY OFFICERS—1964

Society	President	Secretary-Treasurer
ALFALFA-WOODS	Douglas Leatherman, M.D., Waynoka	John F. Simon, M.D., Alva
ATOKA-BRYAN-COAL	A. C. Fina, M.D., Atoka	W. A. Hyde, M.D., Durant
BECKHAM (Roger Mills)	T. J. McGrath, M.D., Sayre	Kenneth Whinery, M.D., Sayre
BLAINE	Not Reported	
CADDO	A. C. Roberson, M.D., Anadarko	G. Conrad Markert, M.D., Anadarko
CANADIAN	Kenneth Peacher, M.D., El Reno	James P. Jobe, M.D., El Reno
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CLEVELAND-McCLAIN	R. C. Mayfield, M.D., Norman	Y. E. Parkhurst, M.D., Norman
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LINCOLN	Jack Mileham, M.D., Chandler	C. W. Robertson, M.D., Chandler
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TILLMAN	F. Polk Fry, Jr., M.D., Frederick	Roger G. Johnson, M.D., Frederick
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WASHINGTON-NOWATA	John Smithson, M.D., Dewey	Elvin Amen, M.D., Bartlesville

Two Tulsa Doctors Honored



Robert M. Shepard, Sr., M.D., veteran Tulsa medical leader, is presented with a gold pin from the Oklahoma State Medical Association in commemoration of the completion of 50 years in active practice.

Making the presentation is Samuel R. Turner, M.D. (left), a member of the OSMA Board of Trustees.

Margaret G. Hudson, M.D., of Tulsa (right), retired Tulsa public health official, has received a Certificate of Life Membership in the OSMA from Doctor Turner.

The ceremonies took place at the April 13th meeting of the Tulsa County Medical Society at The Mayo Hotel.

A native of Mississippi, Doctor Shepard graduated from the University of Tennessee School of Medicine in 1913. He completed his internship at the Kingston Avenue Hospital of Brooklyn in 1913-14. Doctor Shepard practiced at Paterson, New Jersey, for several years. He served as a First Lieutenant in World War I. In 1919 he became a staff member of the tuberculosis sanitarium at Talihina, Oklahoma, and in 1929 entered private practice in Tulsa, specializing in diseases of the chest. He is still in active practice.

Doctor Shepard is a former Presi-

dent of the Tulsa County Medical Society, former President of the Oklahoma Chapter of the American College of Chest Physicians, and former President of the Oklahoma Trudeau Society. He is a former member of the Board of Directors of the National Tuberculosis Association, the Oklahoma Tuberculosis Association and the Tulsa County Health and Welfare Association. His son, Doctor Robert M. Shepard, Jr., is a Tulsa surgeon. Doctor Shepard, Sr., was honored by the Tulsa County Medical Auxiliary as Doctor of the Year in 1961.

Doctor Hudson is a graduate of Johns Hopkins University School of Medicine and interned at the Hospital for Women of Baltimore, Maryland. She practiced with her husband in Peking, China, for several years. Then she was a member of the faculty of the Iowa State University College of Medicine. In 1930, she and her husband, Doctor David V. Hudson, began practice in Tulsa. In more recent years Doctor Hudson has been a staff physician for the Tulsa City-County Health Department. She retired last year. Doctor Hudson, with her husband, was named Doctor of the Year by the Tulsa County Medical Auxiliary this year. □

Rocky Mountain Cancer Conference in Denver

Program plans for the 18th Annual Rocky Mountain Cancer Conference in Denver, July 10-11, have been finalized and will include participation by the presidents of the American Medical Association and the American Cancer Society.

The popular two-day conference in the Mile-High City's Brown Palace Hotel will feature a symposium on "Etiologic Agents of Cancer, Their Avoidance or Prevention" on the first morning followed by an afternoon of scientific papers delivered by some of the nation's foremost physicians. The second morning of the Conference will be devoted to a symposium on "Treatment of Cancer" with an "Information Please" session in the afternoon.

Wendell G. Scott, M.D., president of the American Cancer Society and Norman A. Welch, M.D., who will become president of the American Medical Association in late June, will participate in the Conference.

Other leading participants are Nobel Prize winner Wendell M. Stanley, Ph.D., University of California, Virus Laboratory; Russell Ramon DeAlvaraz, M.D., Professor, Obstetrics and Gynecology, University of Washington School of Medicine; William M. Christopherson, M.D., Professor and Chairman, Department of Pathology, University of Louisville School of Medicine; R. Relton McCarroll, M.D., orthopaedic surgeon, St. Louis; W. P. L. Myers, M.D., internist, Clinical Unit of Memorial Sloan-Kettering Cancer Center, New York; Tom D. Throckmorton, M.D., surgeon, Des Moines.

The conference in the heart of the Rocky Mountain vacationland is a joint effort of the Colorado Medical Society and the Colorado Division, American Cancer Society. Chairman for the 18th Annual Conference is N. Paul Isbell, M.D., of Denver.

Further information on the conference may be obtained by writing: Rocky Mountain Cancer Conference, 1809 E. 18th Ave., Denver, Colorado 80218. □



Announcing Move

The Beverly Hills Hospital The Beverly Hills Clinic

(Formerly Beverly Hills Clinic and Sanitarium)

Acute Psychiatric Diagnostic and Treatment Center

☆ New Outpatient and Hospital Facilities ☆ Beautiful New Buildings On a Secluded Scenic and Wooded Site ☆ Open Cottage System and Regulated Intensive Treatment Units ☆ All Established Methods of Diagnosis and Treatment Utilized. ☆

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DEATHS

MARSHALL O. HART, M.D.

1900-1964

Speaker of the House of Delegates of the Oklahoma State Medical Association, Marshall O. Hart, M.D., died in Atlantic City, New Jersey, April 12th, 1964, while serving as a delegate to the Annual Meeting of the American Academy of General Practice.

A native of Cleveland County, Oklahoma, Doctor Hart graduated from the University of Oklahoma School of Medicine in 1927. A long career of service in various medical groups followed the establishment of his practice in Tulsa in 1928. The general practitioner served Tulsa County Medical Society both as President and Trustee. Before assuming the duties of Speaker of the House of Delegates of the OSMA, Doctor Hart had served as Vice-President of the group. He was President of the Oklahoma State Board of Medical Examiners.

Doctor Hart organized the Tulsa Academy of General Practice in 1951 and served as its first president. The Oklahoma Chapter of the American Academy of General Practice honored him on February 4th, this year, for his long and distinguished service in the profession.

Doctor Hart was one of only a few physicians in the United States who held a law degree. He had gained a national reputation for his knowledge of legal medicine. Although he had not actively practiced law, he held memberships in the Oklahoma Bar Association and the American Academy of Forensic Medicine.

Among his medical affiliations was his membership in the Southern Medical Association.

N. STUART WHITE, M.D.

1895-1964

N. Stuart White, M.D., Tulsa surgeon, died March 24th, 1964 in Tulsa.

A native of Virginia, Doctor White graduated from the University of Oklahoma School of Medicine in 1920. He established his practice in Sand

Springs, later moving to Tulsa. In 1959, he retired from active practice.

The Oklahoma State Medical Association honored Doctor White in 1961 with the presentation of a Life Membership in appreciation for his devotion to the profession.

LORENZO J. PICO, M.D.

1906-1964

Shawnee anesthesiologist, Lorenzo J. Pico, M.D., died April 17, 1964.

Born in Brooklyn, New York, Doctor Pico was a graduate of Long Island College of Medicine. He practiced his specialty in Brooklyn for 21 years before coming to Shawnee in 1960. He was a Diplomat of the American Board of Anesthesiology and a Fellow of the American Board of Anesthesiology.

Doctor Pico was a member of the American Society of Anesthesiology and the New York State Society of Anesthesiology.

ORANGE E. WELBORN, M.D.

1889-1964

Orange E. Welborn, M.D., father of Ada physician, Orange M. Welborn, M.D., died in Ada, April 21st, 1964. Doctor Welborn had been in active practice there from 1927 until his retirement in 1963.

The 74-year-old doctor, a native of Soso, Mississippi, graduated from Baylor University College of Medicine in 1915. He established his practice in Kingston, Oklahoma, where he remained until moving to Ada.

T. R. ROBERTS, M.D.

1891-1964

A 72-year-old Tulsa general practitioner, T. R. Roberts, M.D., died in Tulsa, April 30th, 1964.

Born in Pine Apple, Alabama, Doctor Roberts received his medical degree in 1919 from Emory University School of Medicine. He practiced in Catoosa for four years before moving to Tulsa. He had served as Tulsa County physician during the late 1920s and 1930s.

JOHN T. PRICE, M.D.

1873-1964

A 90-year-old Seminole physician, John T. Price, M.D., died March 15th, 1964.

A graduate of the National University of Arts and Sciences Medical Department in Saint Louis in 1905, Doctor Price had specialized in Ophthalmology and Otolaryngology.

In 1955, Doctor Price was presented a Life Membership by the Oklahoma State Medical Association in recognition of his long years of service to humanity.

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O.S.M.A.

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O.S.M.A. Executive Office

Box 18696 Oklahoma City

OU Medical School Accepts 106 Students For Fall Term

Names of 106 young men and women accepted for admission to the University of Oklahoma School of Medicine have been announced.

They were selected by the Board of Admissions from a total of 498 applicants, an increase of 52 over last year. The new class will enroll in the fall.

One hundred and four will take the four year course of study leading to the Doctor of Medicine degree. The other two will be admitted under a combination M.D. and Ph.D. program that requires six years to complete.

Those given places in the new class are:

Gary Wayne Abrams, Purcell; Thomas W. Amsden, Jr., Norman; Preston A. Bagley, Midwest City; Donald C. Barnett, Tulsa; Michael E. Bell, Edmond;

John Michael Benson, Norman; James E. Berner, Tulsa; Jack Lee Berry, Cushing; Herbert I. Bias, Jr., Shidler; Gary K. Borrell, Oklahoma City; Clark Wesley Brazil, Sentinel; Vaud A. Burton, III, Ardmore; Gerald Ray Butler, Norman; Harrison G. Butler, Tulsa; Stephen B. Campbell, Tulsa; David Tit-Chiu Chan, Tulsa;

Raymond L. Cornelison, Oklahoma City; David Alan Cross, Hobart; Robert W. Daniels, Oklahoma City; Guy Otis Danielson, Oklahoma City; Jerome M. Dilling, Jr., Fletcher; Gorst H. dePlessis, Oklahoma City; John Wesley Ellis, Oklahoma City; Mary Ann Engel, Ada; Jackie L. Finney, Webbers Falls;

Donald Hugh Garrett, Oklahoma City; William P. Gibbens, Oklahoma City; Jimmy D. Giddens, Wakita; James M. Gilliam, Oklahoma City; Richard H. Glassberg, Brooklyn, N.Y.; Lawrence C. Green, Lawton; Charles M. Gunn, Dill City;

Gary W. Harris, Oklahoma City; Thomas D. Harris, Oklahoma City; Joseph W. Hayhurst, Blanchard; Del-

bert L. Heskett, Crescent; Robert G. Hooper, Oklahoma City; Daniel Jay Houtman, Tulsa; William A. Hubbard, Oklahoma City;

Lynn Allen Hughes, Columbus, Ohio; David Rex Hunter, Bartlesville; Robert J. Hutchison, Oklahoma City; Ira M. Jackler, Valley Stream, N.Y.; Oleh I. Jacykewycz, Canton, Ohio; Linda Mae Johnson, Chickasha; Warren W. Kendall, Tulsa; Jack W. Knippa, Tulsa; Robert William Krasnow, Norman;

Samuel Jon LeMonte, Oklahoma City; Sherman B. Lawton, Norman; Stephen Alden Lay, Tulsa; Elton W. LeHew, Jr., Guthrie; Terry Mack Lewis, Lamont; James D. Ligon, Ann Arbor, Mich.; Billy Herman Lipe, Oklahoma City;

Guy Conner Logsdon, Jr., Ada; Lawrence Ray Mansur, Tulsa; James E. Marvel, Lawton; Sidney Ray Matthews, Wilson; George C. McAnelly, Jr., Bartlesville; William James McDaniel, Blackwell; William Edwin McGuire, Talihina; John D. McLaughlin, Parma, Ohio; Alan Duane Menafee, Ada; Dan Eugene Miller, Fairview; Richard Milsten, Tulsa;

Ruthann Monk, Norman; Nicholas E. Moorad, Edmond; Gary M. Moore, Wellston; Thomas Mead Murphy, Ponca City; Charles L. Neal, Tulsa; David A. Neumann, Okarche; John R. Oglesbee, Chilocco; W. B. (Fred) Oldham, Oklahoma City;

Paul Francie Park, Tulsa; Ira Joe Pryor, Olustee; John H. Purcell, Haileyville; David Snow Pyle, Chickasha; Roddie LeRoy Reed, Oklahoma City; David Lester Rice, Watonga; Robert M. Rice, San Antonio, Texas; John K. Ridders, Oklahoma City;

Esber Nabeeh Samara, Oklahoma City; Stanley K. Shields, Tulsa; Randall P. Singleton, Tulsa; William Clifford Slick, Pasadena, Calif.; Sara B. Slight, Oklahoma City; Verne A. Smith, Jr., Tulsa.

Steven V. Stephenson, Chickasha; Thomas Ross Stough, Geary; Ann Elizabeth Tardiff, Tulsa; Max Edwin Taxter, Oklahoma City; Margaret J. Thompson, Hobbs, N. Mex.; Bryan Leon Tipton, Moore; Victor C. Tisdal Jr., Elk City;

Miscellaneous Advertisements

WANTED: G.P. to take over well-established practice in southern Oklahoma town, 25,000 population. Large drawing area. Equipment for lease-purchase or will make other arrangements. Offices consist of reception room, X-Ray, two examining rooms, two bedrooms, laboratory and office. Contact Key J, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

LOCUM TENENS needed for two or three months, beginning June 15th. Would like to accept a call for mission service during this period and need a G.P. to look after my practice. Offer includes comfortable home and office, both rent-free, plus all net proceeds from the practice. Contact A. C. Hirshfield, 908 N.E. 50th, Oklahoma City 5, Oklahoma.

BOARD QUALIFIED surgeon, who would also like to do general practice, needed to join established group of general practitioners in an expanding city of 25,000; new 70 bed general hospital with complete surgical facilities will be completed by July, 1964. This group takes advantage of group practice, but each physician is independent, as far as his office and financial affairs are concerned. Further details furnished on request, please send complete resume with your request. Write Key D, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

(Continued next page)

Hal Benton Vorse, Oklahoma City; Linn William Wainner, Oklahoma City; Roland A. Walters, III, Oklahoma City; Kenneth William Whittington, Oklahoma City; Gary Waine Wilson, Lawton; Ellison H. Wittels, Oklahoma City; John Alvin Wood, Minco; Willie Glen Wyatt, Dill City, and Dorothy West Young, Oklahoma City.

Admitted to the joint M.D.-Ph.D. program: Patrick C. Freeny, Oklahoma City, and Elizabeth Morgan, Scarsdale, N. Y. □

Miscellaneous Advertising Contd.

BIG SAVINGS on "Returned-To-New" and surplus equipment. Reconditioned, refinished, guaranteed, X-Ray, examining tables, autoclaves, ultrasonics, diathermies, or tables, or lights, and more. Largest stock in the Southwest. **WANTED:** Used Equipment. TeX-RAY Co., 3305 Bryan, Dallas. (Open to the profession Wednesdays, Thursdays, 9-5. Other hours by arrangement.)

TWO WELL established doctors in dire need of an associate. A young general practitioner wanted. An industrial oil supply center town of about 100,000 population. One associate gone for specialization. May start on salary, percentage, interest, or any way desired without any expense. If interested, address inquiry to P.O. Box 3669, Odessa, Texas.

GENERAL PRACTITIONER NEEDED. Share office space in new clinic, Sulphur, Oklahoma. No partnership necessary. Good income assured from start, no objection to surgical practice. New county-owned Arbuckle Memorial Hospital will be enlarged to 60 beds by July 1st. City has 5-6,000 population and needs additional doctors. Home of national park attracting one million visitors annually. Contact R. W. Lewis, M.D., 1901 W. Broadway, Sulphur. Telephone 135.

DOCTOR'S WIDOW must sell home. Three bedrooms, living room, dining room, clubroom, two baths and large utility room. Accessible to all schools. Corner lot, northwest area, Oklahoma City. Contact Key F. The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

EXCELLENT opportunity for General Surgeon in established group. Ideal community for family. Contact W. S. Harrison, M.D., The Chickasha Clinic, Chickasha, Oklahoma.

SOUTH OKLAHOMA City's first Medical Center needs pediatrician, internist, dermatologist and urologist for independent practice with presently established nucleus of six other specialists and close affiliation with family clinic of three G.P.'s doing volume practice. New specialties building in center will be only three minutes from new hospital now under construction. Call SWift 4-2246 after 9:00 p.m.

IDEAL opening for young doctor in well established medical clinic, sharing reception room and equipment with three other doctors. Wonderful location on North May Avenue, Oklahoma City. Contact Frank D. Thompson, 3115 N. Pennsylvania, Oklahoma City, JA 5-5700 or JA 4-9552.

WANTED: General Practitioner to join doctor in combined clinic and 16-bed hospital. Prefer one to do OB, some surgery and anesthesia. Salary or arrangements for early partnership. Contact Louis A. Martin, M.D., Curry Clinic, P.O. Box 581, Sapulpa, Oklahoma.

WANTED: Young man desiring general practice in a group of eight men, four of whom are board certified. Starting salary \$1,300 plus percentage per month. Growing agricultural town in Texas Panhandle. Contact C. E. Rush, 309 Lawton, Hereford, Texas.

OPENING IN general practice group, interest in surgery especially desirable. East central Oklahoma community of 10,000 with drawing area of 20,000. Contact Key C, The Journal of the Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

FOR SALE: X-Ray Patrician 200 MA with all accessories except motor drive. Attractive, well cared for, and efficient machine, two years old. Discount of 50 per cent off 1961 price. \$1,000 down, will finance balance, including installation, if desired. Contact Key A, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

RADIOLOGIST needed for private hospital group, in an expanding city of 25,000; new 70 bed general hospital will be ready for occupancy July, 1964; guaranteed salary, if desired, plus commission or other arrangements can be worked out; a very good opportunity for the right person. The individual will have the opportunity to do private office practice in his field of radiology, including therapy if he desires. Write Key E, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

GP—OKLAHOMA town of 5,600. Near Tulsa. Joint Commission accredited 40-bed hospital. Adequate remuneration. Well-trained office staff including ASCP technologist. Equipment and office available—your terms. Other office space available. Specializing. Available now or July 1. Contact Key N, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

OPENING for GP in established practice, northwest Oklahoma City. Large office space, share reception room with two other doctors. Excellent opportunity. Contact David A. Campbell, M.D., 2733 W. Britton Rd., Oklahoma City.

SUBLEASE medical office one year, 735 square feet, desirable location in Tulsa, modest rent, available approximately June 15. Contact Key B, The Journal of the Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

When I assumed the responsibilities and privileges associated with the office of Presidency of the Woman's Auxiliary to the Oklahoma State Medical Association, I was keenly aware of our past heritage and the outstanding accomplishments of those who have served before me.

Each year since its inception the Auxiliary to the OSMA has continued to grow with the idea that we must be progressive if we are to justify our existence. The efforts of preceding years have been gainfully employed and a higher level of attainment reached. Reports of County Presidents and State Committee Chairmen reflect the fact that 1963-1964 is no exception.

The National theme this year "Serve and Communicate," is a challenging theme and has been successfully employed in the State of Oklahoma with much enthusiasm.

To meet the first challenge, *SERVE*, Auxiliary members over the entire state have worked diligently to prove that they as Doctors' wives share the interest of their husbands in the welfare and health of their communities.

Membership was chosen as a priority project this year and a substantial gain was effected with a total membership of 1,309.

Thirteen new nurse loans were granted in the amount of \$2,968.50.

Contributions for American Medical Association-Education and Research Foundation have also reached a new high with a contribution of \$6,425.52.

Greater impetus has been placed on Community Service through the combined efforts of Civil Defense, Health Careers, International Health Activities, Mental Health, Rural Health and Safety. Each of these committees has carried out an excellent program of service and education.

The responsibility for the letter-writing phase of "Operation Hometown" was assumed by the Auxiliary and through this medium conducted a person-to-person fight against medicare; however, this exemplifies only a fraction of the legislative work being carried out by individual members.

The following tabulation (compiled April 22, 1964) shows the results of dedicated service:

Auxiliary	Members	AMA-ERF	Loan Fund
Atoka-Bryan-Coal	14	67.00	10.00

OSMA JOURNAL / auxiliary

Carter-Love-Marshall	28	95.00	100.00
Cleveland-McClain	35	692.26	25.00
Comanche-Cotton	43	65.00	
Craig-Delaware-Cotton	15		
Custer	9	63.00	
East Central	53	2,826.80	25.00
Garfield-Kingfisher-Major	55	335.86	100.00
Grady-Caddo	26	51.50	
Kay-Noble	41	100.00	100.00
Oklahoma	390	756.50	75.00
Okmulgee	14	102.60	
Pittsburg	16	225.00	100.00
Pontotoc-Johnston	26		50.00
Pottawatomie	24	74.00	25.00
Stephens	17	50.00	100.00
Tulsa	319	844.00	810.15
Washington-Nowata	46	45.00	
Members-at-Large	137	32.00	

TOTALS	1,309	6,425.52	1,520.15
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To meet the second challenge, *COMMUNICATE*, the following transpired:

Thirteen of the fourteen districts were visited and the need for greater communication between the Association and the Auxiliary was stressed. It is hoped a new understanding has developed.

A member of the Auxiliary sat in on the planning stages of the OSMA Medicine and Religion Committee and in turn was better able to inform the other members of the Auxiliary on this new phase of total health care.

The President; the Chairman, Council on Public Policy; and the Executive Secretary of the OSMA spoke to the Auxiliary on the aims and program of the Association, stimulating interest in the overall program.

The Woman's Auxiliary Directory was printed in the Association Directory for the first time this year, effecting a 20 per cent increase in our membership and for this we are indeed grateful.

Highest praise and deep appreciation is extended to the Board members who have contributed in making this a successful year. The Woman's Auxiliary to the Oklahoma State Medical Association met the challenge "Serve and Communicate" and during 1963-1964 has been "On Deck to Serve."

MRS. TOM C. SPARKS,
President

Executive Secretary Named PR Advisor. Don Blair, OSMA Executive Secretary, has been appointed to the Public Relations Advisory Committee to the Director of the Communications Division, American Medical Association.

Blue Cross-Blue Shield Paid \$24,300,831 in total benefits to subscribers in 1963. Hospitals received \$16,915,812, representing 90.1 cents out of each dollar of income, and physicians earned \$7,385,019 or a return of 92.1 cents on the dollar. The average cost per day of hospital care was \$26.83, up \$1.01 over 1962, an all-time high.

Accelerated effort has been launched to develop rubella vaccine by major drug firms in cooperation with the National Institutes of Health. Whether a killed virus or live virus should be used remains unresolved, and at least two or three years will be necessary to perfect a vaccine for general distribution.

AMA chief side-steps Belgian issue. F. J. L. Blasingame, M.D., Executive Vice-President of the American Medical Association, answered reporters' requests for a policy statement on the doctors' uprising in Belgium, by saying: "The Belgian situation . . . is a dramatic example of what a beleaguered profession may be driven to do when it feels that its very freedom is being destroyed. It is not for us to judge the wisdom of their reaction but to appreciate that physicians—like all others—can be incited to revolt by politicians who seek to take over the practice of medicine."

Four billion dollars has been spent for hospital construction through the Hill-Burton Program since its inception in 1948, or 31 per cent of total spending for hospital construction.

Financial problems plague insurance companies writing special major medical programs for the elderly. Amid criticism from

investigator Senator McNamara (D., Mich.), company leaders admitted that mass enrollment programs protected about 1½ million persons instead of the two million previously claimed. Also, it has been brought out that premium rates are having to be increased to meet rising medial and hospital costs, the high claim rate by the elderly and some profiteering by oldsters who hold multiple policies and actually turn sickness into an income-producing investment. Incurred losses for one major medical expense program last year were 160 per cent of premium income.

With general elections approaching, physicians can use the "Oklahoma Political Handbook," published by Phil Dessauer, 2151 South 77th East Avenue, Tulsa 29, Oklahoma. They're 25 cents each, and good reading for every good citizen.

OU's Medical Center has filed a "letter of intent" with the federal government to receive matching funds for a new teaching hospital. The business administrator of the center, Mr. Raymond Crews, states that it will be at least four years before the new facility can be ready. First, the 1965 legislature must vitalize the \$7 million bond issue amendment (approved by public referendum) and provide funds to retire the bonds. Then, matching federal funds will be sought under the new Health Professions Educational Assistance Act. Complicating the process is the lack of definition for the federal matching formula under which the University of Oklahoma will qualify. In the meantime, Mr. Crews says, the center is restricted in the acquisition of new research funds due to lack of facilities, and is unable to launch new treatment or teaching activities because of space problems and insufficient funds for staffing purposes.

MEETINGS

- | | |
|-------------------|--|
| May 22 | Oklahoma City Internists Association, OU Medical School Auditorium |
| June 21-25 | American Medical Association, San Francisco |
| July 10-11 | Rocky Mountain Cancer Conference, Denver |

Patient Privacy Puzzles

Publicity Pressed Physicians

ASK A JOURNALIST about doctors and he's likely to shrug, "Tough customers," but ask him about his own doctor and he'll probably smile, "Nice guy."

If you ask doctors about the press their reaction may be a mixture of fear and anxiety but it is a curious fact that any journalist a doctor knows personally, on a friendly basis, always writes good stories straight from the shoulder which are accurate and well founded.

These apparent contradictions only prove an old adage which goes, "If you would cease to dislike a man you should get to know him better." There's so much in this homely wisdom that it could be printed as news once a month with good effect because of the speed that men forget it, doctors and journalists included.

Many problems between journalism and medicine develop because members of the two professions have too little personal contact with each other. Both groups are concerned with matters of human interest, but like the shoemaker's barefoot children they neglect this essential element among themselves. Since all members of the professions can't sit down for a session occasionally, the next best thing is for representatives from each group to get together at regular intervals for a talk about medical-press relations. Among other things, this group should work out a plan for cooperation, a sort of map to guide journalists and doctors toward better medical reporting. Several other states already have recognized the need for a medical-press code and have drawn up broad outlines which are mutually acceptable to the press as well as the medical profession.

Written codes of cooperation between doctors, hospitals and news media have a common goal: to furnish medical news to the public that is authentic and objective and to provide reasonable access to such news for reporting. Without such a guide doctors and hospitals are often afraid to supply any information whatever. They understand of course that by furnishing medical news they encourage a "good press" and create wider public interest in the community as a medical

center but when they talk for publication there's always the gnawing concern that they may be misquoted, misinterpreted, misunderstood or accused of tooting their own horn.

The nature of medical practice is such that doctors have trouble realizing that the final decision on what is news is up to the press. The journalist decides what medical material is newsworthy according to his own character and particular interests, by his taste and background—in other words, as an artist however, his work comes closer to objectivity according to the help and consideration he receives from the medical profession.

Medical news falls into three general categories: specific patients, advancements in science and the activities of various organizations. On impersonal matters including medical societies, hospitals, medical schools and affairs of public health, detailed information is usually offered to the press voluntarily with names, dates and places. In fact, doctors are somewhat disappointed when the press does not consider these items more important than a car wreck which injured five people.

Advancements in medical science are hard to evaluate until so much time has passed that they are no longer news. Unjustified enthusiasm or prematurity in reporting may be harmful to patients and their families who may be falsely encouraged and undergo needless expenses. Penicillin was news, the effect of radiation was news, open heart surgery was news and "spare parts" surgery is news today but for each of these solid steps forward there have been hundreds of brilliant ideas which didn't work out although they seemed good at the time. A man practicing medicine is taught humility every day and one manifestation of this teaching is a sort of conservatism, a reluctance to say that anything is a fact until it has been proved many times. This equivocation makes dull reading so doctors' comments regarding current medical developments are rare-

ly popular with journalists. Here too, the problem of anonymity comes up. So few breakthroughs in medicine these days are the product of one man's work that no one wants to pose as an authority on a subject; in all probability there are others who know more than he does.

When is a man advertising his particular talents? When is he behaving like a quack or charlatan? A doctor's colleagues read the papers too.

News concerning specific patients is the source for most differences between medicine and the press. Treating an illness and at the same time keeping the family posted on the current state of affairs is a full time job. Further, private citizens have a right to control their own publicity when it comes to illness; doctors can't give something that is "privileged," something that isn't theirs. No two illnesses are exactly alike so every medical problem would make a good story. Mankind is so variable, so unpredictable, that every practicing physician runs into many good stories every week among his patients, stories that would make a novelist sit up and listen. Run of the mill? No, it's all in a day's work, but privileged!

Ah, the stories that go down the drain!

What is it, when did it begin, what caused it, how long will it last? How do you plan to treat it and what's the outlook? Dr. X should be able to answer these simple questions, at least if he is competent to manage Mr. Y's problems.

Certain readers might take exception to these observations and we appreciate their concern, but informing the public about medicine today is a job which neither the press nor the medical profession can do without the other.

The principles of cooperation between medicine and the press are like medical ethics, they are largely matters of understanding and common sense. Problems there are and problems there will be but there are none that can't be worked out if we'd just get together occasionally for a . . .
C. B. Dawson, M.D. □

(Reprinted from the May issue of *The Oklahoma Publisher*.)

What's Happened to the Blues?

CONSPICUOUS by its absence at the May 1st-2nd meeting of the House of Delegates of the Oklahoma State Medical Association was any report from the Blue Plans.

In April, 1963, the Blue Shield Board of Directors voted to offer Blue Shield contracts to Oklahoma physicians to cover their personally incurred medical and surgical charges. This was not exactly a new venture, as there are some physicians around the State who had personally obtained Blue Shield policies for themselves previously, but the significant thing was that the action was taken in direct opposition to the expressed vote of the House of Delegates opposing such contracts for physicians in Oklahoma in previous years. Even more notable was the fact that no mention was made of this change in policy of Blue Shield at the May meeting of the Oklahoma State Medical Association and its House of Delegates one month later. The Blue Shield Board, of course, is composed of a majority of physicians, all of whom are members in good standing of the State Medical Association. Blue Shield began solicitation of physicians in due time and the *Journal* called attention to this new promotion in the January, 1964 issue.

Now another year has gone by, and still no mention has been made of this change in policy in any official communications with the State Medical Association. Furthermore, there was no report from either Blue Cross or Blue Shield at our recent State meeting. This omission seems particularly glaring in a year when even our own Association President was a member of the Blue Shield Board.

In the report from the Socio-Economic Council, two physicians are listed as members of the Prepaid Insurance Committee, and this Committee, it was explained to the Board of Trustees, represents the liaison with Blue Cross-Blue Shield. However, there was no report either written or oral forthcoming from this Committee. We are not even told if the Committee ever met. We seem to have come to a complete breakdown in liaison between the State Medical Association and this leader in health and hospital insurance. It seems particularly unfortunate that such a situation has developed at a time when such insurance has become quite pos-

sibly the most important phase of our medical economics.

There was one bit of communication. At the end of Doctor Gullatt's Socio-Economic Council report, he noted that the Council had recommended for nomination to the Blue Cross Board a total of four physicians, three of whom were incumbents. Also recommended were six physicians as nominees to the Blue Shield Board, three of whom were incumbents. In a recent publication by the Blue Plans the results of the election are noted. To the Blue Cross Board, the three incumbents were re-elected. To the Blue Shield Board, the three incumbents were re-elected.—*Walter E. Brown, M.D.* □

A Lesson in Socialism

AS A TEACHER in the public schools, I find that the socialist-communists idea of taking "from each according to his ability," and giving "to each according to his need" is now generally accepted without question by most of our pupils. In an effort to explain the fallacy in this theory, I sometimes try this approach with my pupils:

When one of the brighter or harder-working pupils makes a grade of 95 on a test, I suggest that I take away 20 points and give them to a student who has made only 55 points on his test. Thus each would contribute according to his ability and—since both would have a passing mark—each would receive according to his need. After I have juggled the grades of all the other pupils in this fashion, the result is usually a "common ownership" grade of between 75 and 80—the minimum needed for passing, or for survival. Then I speculate with the pupils as to the probable results if I actually used the socialistic theory for grading papers.

First, the highly productive pupils—and they are always a minority in school as well as in life—would soon lose all incentive for producing. Why strive to make a high grade if part of it is taken from you by "authority" and given to someone else?

Second, the less productive pupils—a majority in school as elsewhere—would, for a time, be relieved of the necessity to study or to produce. This socialistic-communist system would continue until the high producers had sunk—or had been driven down—to the

level of the low producers. At that point, in order for anyone to survive, the "authority" would have no alternative but to begin a system of compulsory labor and punishments against even the low producers. They, of course, would then complain bitterly, but without understanding.

Finally I return the discussion to the ideas of freedom and enterprise—the market economy—where each person has freedom of choice and is responsible for his own decisions and welfare.

Gratifyingly enough, most of my pupils then understand what I mean when I explain that socialism—even in a democracy—will eventually result in a living-death for all except the "authorities" and a few of their favorite lackeys. □

* * *

A letter from THOMAS J. SHELLY, teacher of Economics and History, Yonkers High School, Yonkers 2, New York

January 20, 1951

Reprinted by permission of Thomas J. Shelly and the Foundation for Economic Education, Inc. with whom Mr. Shelly is now associated.

Will Medicine's Voice Be Silenced?

THE OFFICIAL publications of medical societies are being threatened by extinction due to the diversion of pharmaceutical advertising to national commercial magazines. Commercials grow fat while state and county medical association journals and bulletins dwindle to the point of insolvency.

As an example of the trend, the prize-winning *Journal* of the Oklahoma State Medical Association earned \$41,690.23 in national advertising revenue in 1959, but slipped to \$19,931.43 last year. It is now being published at a loss.

Although many commercial publications are admittedly of high quality, have large circulations, and enjoy low-cost-per-reader advertising rates, the national drug advertisers should have more than a mercenary attitude toward the medical association journals which provide the backbone of official communications for the profession.

Where else can the average doctor regularly record his views, either scientifically or

(Continued on Page 280)



The annual meeting of the Oklahoma State Medical Association—held in Oklahoma City on May 1st-3rd—was a great success. The program was of a new type and was very useful to the practicing physician.

These state meetings are held for our membership, and represent a continuous OSMA effort to make them interesting and informative. Planning committees work diligently to prepare the annual meeting program, and it is the membership's responsibility and privilege to attend and participate.

Planning for our next convention—scheduled for Tulsa on May 14th-16th, 1965, is already underway. OSMA members are urged to set this time aside before their schedules are otherwise filled.

* * * * *

I am sure that many of us have tired of the repeated, urgent plea for physicians to get active in politics, fight the King-Anderson Bill, etcetera. Doctors are often heard to say, "Let's get out of politics and practice medicine," or "Let the politicians run their business and we will run ours."

I can agree with the nobility of the thought, but cannot support such naivety or impracticality. We *must* participate in politics and, indeed, be politicians. Only by being good, informed and active politicians can we survive and mind our own "businesses."

I urge (and even beg) each of you to become a first-rate politician during the next few months (and thereafter). Pick your candidate, know where he stands, support him and let him know of your support. Let him know that you are interested in how he thinks and how he will vote if elected.

He will respect you for it, and *so will your patients.*

If you are afraid that patients will be lost as a result of your political interest, don't be. Surveys disprove this fear, and in many cases new patients will come to you because you have conviction and gumption.

Physicians can develop an effective political voice if we work toward this goal. We must not and dare not lose by default. Some of our members are working daily, even giving overtime, to fight for what we believe to be best for our patients as well as for ourselves. These dedicated men need help and they don't ask to be relieved, just assisted. Neither are they ambitious to lead or direct, but they hope to realize a unified effort by their example.

I urge all OSMA members to join these workers—not for me, not for them, but for *your own salvation.*

* * * * *

I would like to express my gratitude for the very favorable response to the council and committee appointments that we have made. It is heartening to know that we have a very large segment of men willing to give of their time and knowledge.

The business of the association will receive top level attention. I hope to keep meetings to a minimum, commensurate with full attention to the affairs at hand.

We will try to recognize the value of physicians' time.

Harlan Thomas MD

Immunological Pregnancy Tests-- Their Potentialities and Limitations

JOE BILLS REYNOLDS, M.D.

New immunological tests for pregnancy are accurate early, but false positive results, in menopause and pathological pregnancies, may lead to misinterpretation of the clinical status.

THE WIDESPREAD acceptance of immunological tests for pregnancy being used increasingly in hospital and private laboratories makes it important that the practicing physician realize the limitations and potentialities of these tests in relation to the previous animal methods. The purpose of this paper is not to endorse any test, but rather to summarize the literature of the last few years, and to alert the physician that no test is a panacea. Clinical judgment and discrimination must be adhered to in the interpretation of these procedures.

The new pregnancy tests have been developed on the principle that gonadotropins of one species may effect the biological response in target organs of other species. The basis of the newer tests is the specific immunological reactivity of antihormones produced in response to hormone administration, specifically, anti-human chorionic gonadotropins. These tests used sensitized red blood cells,²² coated latex sensitive particles¹⁵ or antiserum agar.⁸ The antigen is in the pa-

tient's urine. Naturally, the effectiveness of these tests, as well as those procedures using animals is dependent upon the rapidity and amount of human chorionic gonadotropins (HCG) produced following pregnancy. The abbreviation HCG henceforth will refer to human chorionic gonadotropin.

The peak elevation of HCG is reached early in pregnancy. Most authors give the peak range of between the sixteenth and sixty-fifth days of pregnancy with a rapid fall after the eighty-fourth day.⁵ This low level remains throughout pregnancy. It disappears completely from the blood and urine within three to ten days postpartum.³ Peaks between 40 and 60 days have been reported by five separate authors.²

No positive pregnancy tests occur with HCG at low levels, therefore, it is unlikely to have a positive test before the eighth day after a missed menstrual period.^{11, 4} This, theoretically, is about the twenty-fifth day of pregnancy.

A medical technologist working in a private laboratory suspected pregnancy when she failed to have a menstrual period. Seven days after the anticipated menstrual date a Wampole pregnancy test was done, and a positive result was obtained. At the same time the Ortho pregnancy test was negative. Symptoms of pregnancy occurred shortly after this and pregnancy was definite.

Friedman, in his article on animal testing in pregnancy, felt it was the thirty-seventh day of pregnancy before sufficient HCG could be accurately detected.^{4, 24}

Tests / REYNOLDS

Sensitivities of three tests are compared to animals in Tables I, II, and III.

High levels of HCG occur during the first trimester of pregnancy with maximum levels of 500,000 and 600,000 International Units^{2, 4, 11} reported. The levels generally remain less than 100,000 International Units. There are multiple measuring systems or units of activity. These are defined below. The International Unit (IU) equals the effect of 0.1 microgram of crystalline estrone on the vaginal cells of a castrate rat.¹³

- 1 Rat Unit (RU) equals 10 Mouse Units (MU)¹³
- 1 RU equals 10 IU
- 1 IU equals 1 MU
- 1 Male Frog equals 0.5 RU
- 1 Female Frog equals 5 RU

At the present, in order to prevent false positive reactions, immunological tests detect a minimum of 1.5 IU of HCG in 0.1 ml. of a one to two dilution of urine or 750 IU per 100 ml. of undiluted urine, although most

test only 1,000 IU per 100 ml. of urine. Frog and toad tests are much less sensitive and detect a minimum of 70 IU in 2.5 ml. of urine extract.¹² The accuracy of these tests, in comparison to animals, is demonstrated in Table IV.

Many other factors also enter into the accurate diagnosis of pregnancy. These include: abnormal pregnancy; drug ingestion, especially phenothiazine, promazine, and salicylates; pituitary gonadotropins; and the patient's age.

The effect of certain drugs has been mentioned as causing false tests when using urine.^{1, 6, 9} The present immunological tests are presumably not affected by drugs.

The presence of gonadotropins from the pituitary or endometrium may produce false positive reactions.¹⁷ A test should measure urinary levels of HCG of at least 500 IU per 24 hours since interference of other gonadotropins is prevented by the dilution factor.¹¹ The other means of elimination is by

TABLE NUMBER I¹⁹

Days From LMP	Number	WAMPOLE (UCG)			RAT				Died
		Positive	Negative	% Correct	Positive	Negative	% Correct		
0-29	1		1	0	1		100		
30-34	10	7	3	70	9	1	90		
35-39	17	15	2	88	17		100		
40-44	24	24		100	22	1	96	1	
45-89	123	119	4	97	111	3	98	9	
90-	30	28	2	93	25	1	98	4	
Undetermined	28	28		100	27		97	1	
TOTALS	233	221	12	95	212	6	97	15	

TABLE NUMBER II^{2,5}

Days From LMP	Number	ORTHO (GRAVINDEX)			TOAD		
		Positive	Negative	% Correct	Positive	Negative	% Correct
38-42	17	14	3	82	11	6	65
43-89	64	63	1	98	61	3	95
90-	22	21	1	96	17	5	77
TOTALS	103	98	5	95	89	14	86

TABLE NUMBER III^{*16}

Days From LMP	Number	ORGANON (PREGNOSTICON)			RAT			
		Positive	Negative	% Correct	Positive	Negative	% Correct	Died
1-14	14	2	12	14	0	13	0	1
15-30	122	57	65	47	50	69	42	3
31-45	435	236	199	54	205	228	47	2
46-89	234	112	122	48	92	141	40	1
90-	300	138	162	46	111	186	38	3
TOTALS	1105	545	560	49	458	637	42	10

*It should be noted, that although the percentage of correct tests is low, Pregnosticon compares more favorably than the rat in this series.

TABLE NUMBER IV#

Name of Test	PREGNANT			NON-PREGNANT		
	Positive	Negative	% Correct	Positive	Negative	% Correct
*Wampole (UCG) ¹⁴	221	12	95	18	246	93
Rat	212	6	97	25	223	90
**Organon ¹⁶ (Pregnosticon)	545	0	100	0	560	100
Rat	422	117	79	50	506	91
Hemagglutination ¹⁷ (Non-commercial)	392	8	98	0	100	100
Mice	395	5	99	0	100	100
Burroughs-Wellcome ²⁰ (Prepuerin)	140	6	96	1	93	99
**Organon (Pregnosticon)	78	2	99	1	115	99
Frog	77	0	100	0	93	100
***Ortho ²⁵ (Gravindex)	98	5	93	1	30	97
Male Toad	89	14	84	0	18	100

#It would be impossible to compare these immunological tests with each other, since the conditions under which each test was done would be variable. Each is compared with an animal test.

*Refer to Table Number I

**Refer to Table Number III

***Refer to Table Number II

TABLE NUMBER V¹⁷

Condition	Number	HEMAGGLUTINATION (NON-COMMERCIAL)			ASCHEIM-ZONDEX		
		Positive	Negative	% Correct	Positive	Negative	% Correct
Pregnancy	400	392	8	98	395	5	99
Climacteric	50	12	38	76	2	48	96
Carcinoma of Uterus and Cervix	20	4	16	80		20	100
Choriocarcinoma	4		4	0		4	0
Non-Pregnant	100		100	100		100	100

TABLE NUMBER VI⁷

Condition	Number	ORTHO (GRAVINDEX TUBE)			FROG		
		Positive	Negative	% Correct	Positive	Negative	% Correct
Incomplete Abortion*	1	1				1	
Missed Abortion*	2	2				2	
Postpartum*	8						
2 days		1			1		
1-3 weeks			4			4	
4-6 weeks		2				2	
7-12 weeks			1			1	
Polycystic Ovaries	2	2		0		2	100
Scrotal Abscess	2	2		0		2	100
Embryonal Carcinoma of testes	2	2		0		2	100

*Percentages can not be determined as viable trophoblastic tissue may continue to produce low levels of chorionic gonadotropins, detectable only by the immunological tests.

HCG *specific* antihormones which at present are difficult to produce.

The pertinent problem here, and one which has appeared in this hospital, is that body conditions, other than pregnancy, may cause a rise of HCG or other gonadotropins which may produce immunological tests indicative of pregnancy.

Salzberger and Nelkin,¹⁷ in 1963, reported on a series of patients giving false tests. They reported false negative tests in urines of low specific gravity and false positive

tests in the climacterium; carcinoma of the cervix and uterus; and elevated pituitary gonadotropin. Table V indicates their results using the Aschheim-Zondex bio-assay test in contrast to a non-commercial hemagglutination pregnancy test. Table VI gives similar results reported by Henry and Little.⁷ One can readily see from these tables, that the delicate immunological tests for pregnancy must be used with good, sound, clinical judgment as with previous animal pregnancy tests.

The following two case histories exemplify the necessity for good, clinical judgment. These are examples in which false positive immunological tests occur in the climacteric group of females.

CASE HISTORY I

A 51-year-old white female, para four, gravida four, was admitted to this hospital with a history of regular menstrual periods until two months prior to admission when amenorrhea occurred. The only other irregularity of menstruation occurred six months prior to admission when she had periods every two weeks for two or three months. The patient had seen her family physician because of headaches and a breast mass. There was no history of symptoms of menopause or pregnancy. Examination revealed the uterus enlarged two times normal size. An Ortho slide pregnancy test was reported positive. This test was repeated and reported as equivocal. A Friedman test was done and reported negative. The patient was subsequently reported not pregnant.

CASE HISTORY II

A 51-year-old white female para four, gravida five, aborta one, was seen by her family physician February 14, 1964, because of a bloody, vaginal discharge with bloating, cramping, and fullness of the lower abdomen for one month. She stated that her last menstrual period was November 8, 1963, but that she had been having increasing hot flashes for three years. She stated that pregnancy tests (Wampoles) had been done on two separate occasions and reported positive by another physician. She had been told that she was pregnant, although physical findings were apparently not compatible with pregnancy. Physical findings at this time were normal, and the uterus was not enlarged. She was asked to return in two weeks but she was next seen by her family physician on February 26, 1964. Wampole's pregnancy test was repeated, and at the same time a urine specimen was sent to a private laboratory. These tests were reported positive. Physical findings were again

normal and no uterine enlargement or adenexal masses could be detected. The diagnosis was a functional ovarian tumor. She was referred to a gynecologist for evaluation and treatment. She saw the gynecologist March 10, 1964. The physical examination revealed a normal cervix and uterus without adenexal masses. Cytology was normal. A vaginal smear revealed a low estrogen level with slight cornification. This was interpreted as compatible with menopause. There was no physical evidence of pregnancy. Immunological pregnancy tests were repeated and both Wampole and Ortho were positive. A frog test was done at the same time and reported negative. With this report and lack of physical signs of pregnancy, it was assumed that the immunological tests were false positives due to a climacteric state with increased circulating pituitary gonadotropins. The patient was started on Premarin 0.625 mg. daily for three weeks, and a repeat immunological test for pregnancy was negative.

A situation of probably more serious consequences is one in which the sensitive immunological pregnancy test remains positive for prolonged periods after intrauterine death of the fetus. This is especially true when the blood fibrinogen is allowed to drop to low levels because the physician does not want to evacuate the uterus, on clinical grounds, in the face of a positive pregnancy test. HCG undoubtedly continues to circulate after fetal death in this situation in continually decreasing levels, yet it is still detectable by the sensitive immunological tests. This, then, is the situation where animal testing is again of value for a more nearly accurate diagnosis. The bio-assay will not detect HCG which has declined to a level below that of normal pregnancy.²⁰ The following is an example of this situation.

CASE HISTORY III

A 23-year-old Negro female para three, gravida three, was first seen by her obstetrician October 6, 1963, with a history of the last menstrual period August 18, 1963. She had definite symptoms of pregnancy. The obstetrician diagnosed pregnancy after her examination October 30, 1963. She felt no fetal movement between December 26, and

TABLE NUMBER VII¹⁹

Condition	Number	WAMPOLE (UCG)			RAT			Died
		Positive	Equivocal	Negative	Positive	Equivocal	Negative	
Ectopic Pregnancy	19	13	0	6	13	2	4	
Inevitable or Incomplete Abortion	142	110	2	30	92	9	28	13
Missed Abortion	18	5	1	12	8	0	9	1
Post Abortion	30	5	2	23	3	3	22	2

TABLE VIII¹⁸

Condition	Number	HEMAGGLUTINATION (NON-COMMERCIAL)			TOAD		
		Positive	Negative	% Correct	Positive	Negative	% Correct
Hydatid Mole	31	2	29	6.5	2	29	6.5
Pregnant (with diagnosis of mole)	4	4		100	4		100
Choriocarcinoma in females	2	1	1	50	2		100
Choriocarcinoma in males	2	1	1	50		2	0

December 31, as had been previously detected. The patient had a small amount of vaginal bleeding on January 5, and still no fetal movement. The Wampole pregnancy test was positive on January 22, and the uterus was described as being the size of an eight to ten weeks pregnancy. The question of a missed abortion arose. The uterus was unchanged in size on February 12, and 26, and the Wampole and Ortho pregnancy tests were positive on the latter date. At the suggestion of the author that the immunological tests were too sensitive and were only detecting remaining HCG after fetal death, a frog test was done on the same concentrated urine specimen. This was negative. The patient was hospitalized and the blood fibrinogen was reported 63 mgs. per cent. The Ortho test was repeated and gave an equivocal result. A rabbit test was done. The uterus was emptied due to the low blood fibrinogen before the rabbit test could be reported, and a missed abortion was definite. The rabbit test was later reported negative.

The important point to emphasize is that the immunological tests at this time *can not be used unequivocally* in determining the status of an abnormal pregnancy. However, these tests must be considered, in general, equal to, or superior to the different animal tests, particularly in the *early* diagnosis of pregnancy.

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A comparison of abnormal pregnancies is shown in Tables V, VI, and VII.

Another field of insecurity is in the diagnosis of hydatiform moles and choriocarcinoma by the immunological test. A mole or choriocarcinoma must be considered probable when a urine gives a positive pregnancy test in a 500 plus dilution. Very little specific information has been published in regard to immunological testing, although most immunological tests have a quantitative method of testing for hydatiform moles or choriocarcinomas.^{10, 15, 22}

Hepler,⁸ describes a quantitative Friedman test in which dilutions of urine 1:10, 1:100, and 1:1,000 are used. When a 1:10 dilution is positive, it represents, a normal pregnancy. If a 1:100 or 1:1,000 dilution is positive it may represent a tumor. The present recommended method of determining abnormally high HCG concentrations with immunological tests is by dilutions.^{10, 15, 22}

Djopopramoto² compared one hundred-thirty moles and twenty-two choriocarcinomas with the male toad (*Bufo melanostictus*), and the Friedman rabbit test. Sixty-two per cent of all moles had 400,000 IU per liter (1:400 dilution), with a range from 100,000 IU up, in the toad.

Forty-one cases of hypermeses gravidarum showed titers of 200,000 IU per liter (1:200 dilution) with forty per cent 100,000 IU per liter (1:100 dilution). Elevated HCG also occurs with pre-eclampsia, twins, and hydramnios.

Caution must be used when the patient is less than one hundred days pregnant in interpreting HCG levels as abnormal. The level after one hundred days is rarely over

Tests / REYNOLDS

20,000 IU per liter.^{2, 5} Delfs²¹ feels that a persistent or rising HCG titer of 20,000 IU per liter thirty days after evacuation for a mole, indicates a malignant change or at least viable trophoblastic tissue.

Tables V, VI, and VIII, give an indication of accuracy in diagnosing these conditions with the immunological pregnancy tests.

DISCUSSION

The new immunological tests for pregnancy are the *method of choice* for early detection of *normal pregnancy* due to their increased sensitivity. The physician should realize that they also have limitations, particularly in the early diagnosis of intrauterine death and during the climacterium. Most false tests occur as a result of slightly elevated normal gonadotropins, or of persistent levels of chorionic gonadotropin following intrauterine death which are readily detected by the sensitive immunological tests. This necessitates the use of the less sensitive animal tests for a more accurate correlation of clinical and laboratory data.

The companies now producing these tests are continuing their research for improvement in these areas as well as for the use of serum in immunological tests. At the present time, however, the final diagnosis is dependent upon a knowledgeable, clinical judgment.

SUMMARY

1. Immunological tests are extremely sensitive.
2. Early, accurate diagnosis of pregnancy is increased by these tests.
3. False reactions occur with elevated normal levels of gonadotropins, fetal

death, carcinoma of the endometrium, hydatiform moles, and choriocarcinoma.

4. Animal tests are still indicated when laboratory reports do not correlate with clinical findings.

* * * * *

I wish to express my gratitude to Henry G. Bennett, M.D., Scott Hendren, M.D., Gerald Rogers, M.D., and James Beavers, M.D., permission to include their cases in this paper.

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YOUR LIABILITY

Q—May a physician temporarily leave or interrupt his practice without being liable to a patient for lack of diligence?

A—Yes, provided the physician makes proper provision for the attendance of a competent physician during his absence, timely informs the patient of his unavailability and the substitution, and does not absent himself while the patient is in a critical condition. *Miller v. Dore*, 148 A 2nd 692.

A Case of Chronic Pancreatitis Without History of Pain

BARTIS M. KENT, M.D.
THOMAS J. HANLON, M.D.

An unusual case of advanced chronic pancreatitis is presented which did not manifest a course of recurrent acute episodes of pain during its development.

CHRONIC PANCREATITIS is a very evasive disease which at times can cause untold diagnostic problems. That the etiology is poorly understood is reflected by the many varied theories of causation. The course is one of various manifestations; often initiated by recurrent episodes of acute, intermittent manifestations — usually pain, nausea and vomiting. This causes progressive damage to the pancreatic tissue which finally results in insufficient pancreatic function in the later stages.

The etiology is generally considered to be related primarily to chronic alcoholism or chronic gallbladder disease, frequently cholelithiasis. Some investigators have classified the disease on the basis of one or the other of the above conditions.¹ Other causes which have been implicated are hyperlipemia, metabolic disturbances, trauma, infection, vascular disorders, allergic manifestations, neurogenic factors and hereditary influences. The presence of a hereditary factor has been established in certain cases of classical pancreatitis and has been shown to be due to a

dormant gene in one of the autosomal pairs.^{3, 4}

Even more confusing has been the effort to determine the pathogenesis of changes resulting in pancreatitis. Four theories are generally advanced to explain these changes.⁴

1. *The obstructive theory* holds that obstruction of the pancreatic duct in combination with hypersecretion of the exocrine glands results in increased pressure in the duct sufficient to cause rupture. This results in edema, congestion, and focal hemorrhage in the pancreatic tissue and eventually results in necrosis and fibrosis of the gland. This reaction appears to be brought about by activation of the enzymes within the tissue. Apparently, obstruction of the duct alone, without the stimulus of hypersecretion is not sufficient to cause these changes.

2. *The common channel theory* holds that pancreatitis results from reflex of bile into the pancreas through a common channel between the common bile duct and the pancreatic duct. This occurs when the ampulla of Vater is obstructed. It is believed that the bile results in destruction of pancreatic tissue; however, there is much evidence to refute this.⁶

3. *The toxic theory.* Certain chemicals have been shown to produce pancreatitis experimentally.⁷ Alcohol is thought to have its effect in this manner.

4. *The infectious theory.* This cause does not account for very many cases of pancreatitis. Acute pancreatitis will occur following mumps, scarlet fever, and certain dysenteries. Whether or not infectious agents will

result in chronic pancreatitis, however, is highly uncertain.

Although the course of chronic pancreatitis is usually initiated by recurrent attacks of epigastric pain, this is not always the case. Coffey, in reviewing 105 cases of pancreatitis, found this course to be present in only 70 per cent of the cases.⁸ The remainder of the manifestations secondarily resulting from pancreatic insufficiency are the results of the long-term inflammatory reaction, and in his 105 cases it appears with the following frequency:

X-ray evidence of calcification of the pancreas	40%
Diabetes mellitus	39%
Steatorrhea	9%
Epigastric mass—palpable on examination	6%
Jaundice	13%
Hyperparathyroidism	4%
Pleural effusion	5%

Chronic pancreatitis has been shown to present itself occasionally as a subdiaphragmatic abscess, abdominal abscess, or perinephric abscess.⁹ It may cause thrombosis of the splenic vein which results in portal hypertension and esophageal varices or ascites.

The Veterans Administration Hospital at Muskogee, Oklahoma had the unique opportunity to study an unusual case of progressive chronic pancreatitis which was not associated with the usual episodes of pain characterizing this disease. The patient, age 42, was first seen on 16 February, 1953 at which time he was hospitalized until 2 March, 1953 with influenza. His illness was a typical acute episode of upper respiratory infection, which responded to therapy. At that time he gave a history of having been told five years previously that he had a bad heart, although he had no cardiovascular symptoms. History was otherwise significant in that he consumed one quart of whiskey per week and that he smoked half a can of tobacco daily. Findings at the time of discharge were essentially normal, other than a blood pressure of 206/120 and electrocardiographic findings of a left heart strain pattern.

He remained asymptomatic two years, when he was again hospitalized with pneumonia. At this time he was found to be in diabetic acidosis (the diabetes was previously unknown to him). He responded to treat-

ment and was discharged on 30 units of PZI insulin daily. He had no gastrointestinal complaints at this time. His blood pressure remained elevated. However, he admitted that he did not take any antihypertension medication when out of the hospital.

He was next seen eight months later with a laceration of the lip. He had no gastrointestinal complaints at this time. However, because of the incidental finding of an epigastric mass on physical examination and a history of 20 pounds weight loss, he had gastrointestinal and gall bladder x-ray studies. These were reported normal. He was maintained on a 2500-calorie diabetic diet and 30 units of PZI insulin daily.

He was next admitted to the hospital almost four years later, this time complaining of abdominal distress and weight loss. He was again in diabetic acidosis. The abdominal distress was acute, having occurred suddenly on the day of admission. The patient was treated for acidosis; he responded promptly and experienced no further abdominal distress. He was maintained on 40 units of NPH insulin daily and a 2,000 calorie diet. He remained in the hospital one month, during which time he had frequent stools. He gave a history of diarrhea consisting of from five to ten stools daily during the previous two years. These stools alternated between liquid and soft-solid, contained undigested food particles and had a greasy, white appearance. At this time it was first suspected that the patient might have chronic pancreatitis. During this hospitalization he

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underwent gastroscopy which showed chronic hypertrophic gastritis. The stools were negative for ova, parasites and pathogenic organisms on at least three occasions. X-ray of the upper gastrointestinal tract was reported as consistent with hypertrophic gastritis; however, lymphoma of the stomach was considered. The patient's blood pressure at this time was 110/90.

The patient improved with conservative management and was discharged from the hospital. He was next admitted to the hospital in insulin shock from which he promptly recovered. At this time he gave a history of continued frequent stools. Because of improvement in the hospital he was discharged and was not seen again until 3 March, 1960 when he was again hospitalized because of continued diarrhea, weight loss, weakness and generalized pruritis. He was somewhat emaciated at this time. During his hospitalization a serum lipase level was 0.5 units. The stool examinations were negative for ova, parasites and pathogenic organisms. The patient was treated conservatively and was allowed to go home.

He returned three months later with a recurrence of the diarrhea as well as weakness, dehydration and decubitus ulcer of the right hip. At this time the urine amylase was 162 Somogyi units. The 24-hour excretion of amylase was 1620 units; the 24-hour stool excretion of amylase was 21,800 units; the serum amylase was 99 units. The serum lipase was 0.15 units; the urine lipase was 0.05 units; the stool lipase was 3.5 units. Gastric analysis showed 62 units of free acid with 75 units of total acid. PBI was 6.3 mu per cent; electrophoretic pattern was within normal limits except for a slight increase in the A₂ globulin. The patient was treated with 2500 calorie diabetic diet and placed on a sliding scale dosage of regular insulin. Because of an infection of the right great toe, leg amputation was done. The patient returned home after the surgery. How-

ever, he again required admission on 25 October 1960 for skin graft of the decubitus lesion. During this time he continued to have severe diarrhea with stools characteristic of a malabsorption syndrome. Repeated stool examinations remained negative for the presence of ova-parasites. The hemoglobin at this time had dropped to 8.6 with a hematocrit of 31 per cent; it had been normal previously. The patient continued a downhill course and expired 18 December, 1960.

Autopsy. The body was that of an extremely emaciated adult colored male weighing 65 pounds and 69 inches tall with multiple decubitus ulcers. The lungs showed bronchopneumonia. The pancreas weighed 70 grams. The duct of Wirsung contained milky material. The architecture was distorted on microscopic examination, with excessive increase in the connective tissue component. There was a marked decrease in the exocrine and insular tissue. The small intestines were normal grossly and microscopically.

This case is reported with the thought that it represents one of the rare cases of chronic pancreatitis without the usual background history, which developed while the patient was being followed by a hospital group, but without any significant periods of pain.

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Ophidiasis in Oklahoma

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An estimated 206 people are bitten by poisonous snakes annually in Oklahoma, providing the State with the fourth highest incidence of bites for the states west of the Mississippi River. The epidemiology and treatment of poisonous snakebites are discussed.

OPHIDIASIS or snake venom poisoning is an important medical problem in Oklahoma. Oklahoma has the fourth highest annual snakebite rate of the states west of the Mississippi River. The leading annual snakebite rates per 100,000 population for these states are found in Arkansas (17.19), Texas (14.70), Louisiana (10.25) and Oklahoma (8.85). It is interesting that all of these states are members of the West South Central Region of the United States. In view of these findings it is remarkable that only one person in Oklahoma died from a poisonous snakebite during the ten-year period, 1950-1959.¹ A careful study of Oklahoma's snakebite problem has never been published. There-

fore, it seemed worthwhile to define the epidemiology of poisonous snakebites in Oklahoma, to relate some medical findings associated with these bites and to review briefly current concepts of snakebite treatment.

POISONOUS SNAKES

According to Conant,² the following species and sub-species of poisonous snakes are indigenous to Oklahoma: the western diamondback rattlesnake (*Crotalus atrox*), the timber rattlesnake (*Crotalus horridus horridus*), the prairie rattlesnake (*Crotalus viridis viridis*), the western pigmy rattlesnake (*Sistrurus miliarius streckeri*), the western massasauga (*Sistrurus catenatus tergeminus*), the desert massasauga (*Sistrurus catenatus edwardsi*), the northern copperhead (*Agkistrodon contortrix mokeson*), the broad-banded copperhead (*Agkistrodon contortrix laticinctus*), and the western cottonmouth moccasin (*Agkistrodon piscivorus leucostoma*). There are no coral snakes native to Oklahoma. Thus, there are nine species or sub-species of poisonous snakes in Oklahoma. See figure 1 for photographs of poisonous snakes of Oklahoma.

Oklahoma's poisonous snakes are all pit vipers. They are so named because of a characteristic pit which is located between the eye and nostril on each side of the body. Pit vipers also are identified by elliptical

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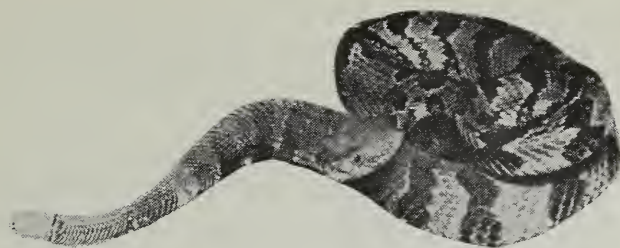
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acteristic features of pit vipers and harmless snakes.

METHODS OF STUDY

A questionnaire and letter explaining the purpose of this study were mailed to a "selected" group of Oklahoma hospitals listed in the *Journal of the American Hospital Association*, Hospitals Guide Issue. The hospitals selected for this study were general hospitals, children's hospitals and college infirmaries. Army, Navy, Coast Guard, Public Health Service, Air Force and Veterans Administration hospitals also were sent questionnaires. Maternity, tuberculosis and mental hospitals were omitted since they would not be expected to treat snakebite victims. A total of 116 Oklahoma hospitals comprise the study group. Each hospital was requested to report all in-patients admitted to the hospital for snakebite treatment during 1958 and 1959.

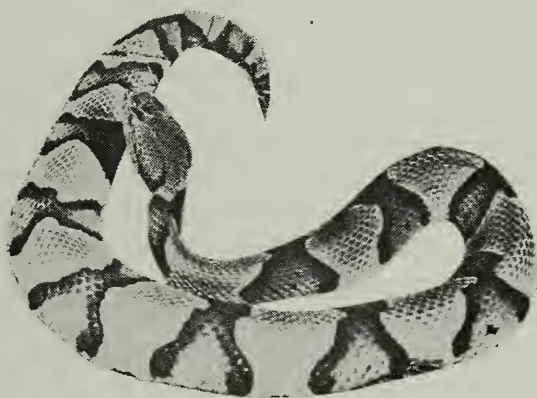
Most hospitals do not code and tabulate the diagnoses of emergency room and outpatient clinic visits. Since some snakebite victims are not admitted to the hospital as in-patients, it seemed essential to ask a sample of practicing physicians how many snakebite victims they treated on both an outpatient (office, home, emergency room, etc.) and on an in-patient basis. Previous surveys,^{3, 4} have shown that most people with venomous snakebites are treated by general practitioners, surgeons, internists, pediatricians and orthopedic surgeons. Therefore, a random sample of one-third of all the



RATTLESNAKE



COTTONMOUTH MOCCASIN



COPPERHEAD

Figure 1

pupils and by two well-developed fangs which protrude from the maxillae when the snake's mouth is opened. Rattlesnakes have rattles which are attached to their tails. Copperheads, cottonmouth moccasins and harmless snakes do not have rattles. Harmless snakes do not have facial pits, they have round rather than elliptical pupils, and while they have teeth, they lack fangs.

Oftentimes people will chop the head off a snake which has bitten someone and bring in the snake's body for identification. Pit vipers can be identified by turning the snake's belly upwards and noting a single row of subcaudal plates just below the anal plate. Harmless snakes have a double row of subcaudal plates. Figure 2 depicts the char-

CHARACTERISTICS OF SNAKES

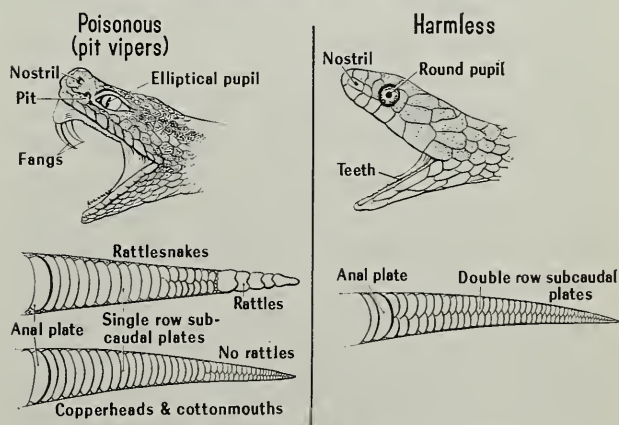


Figure 2

Oklahoma physicians in these categories of practice who were listed in the *A. M. A. American Medical Directory* were sent questionnaires.

Death certificates for fatal snakebite cases were obtained from the Oklahoma State Department of Health.

RESULTS

This report is based on questionnaires returned by 108 (93 per cent) of 116 Oklahoma hospitals. It is supplemented by questionnaires returned by 390 (73 per cent) of 533 practicing physicians in the State. The Oklahoma State Department of Health indicated that there was one snakebite death during 1958 and none during 1959.

Incidence—Oklahoma hospitals reported a total of 69 in-patients treated for poisonous snakebites during 1958 and 1959. There were 34 cases in 1958 and 35 cases in 1959—an average of 34.5 cases per year. Of the 69 snakebites reported during 1958 and 1959, detailed case reports were received for 66 patients and only numbers of bites were reported for three cases. *All analyses in this paper, excluding the estimate of incidence, were based on the 66 detailed case reports received from hospitals.*

Physicians' reports, when adjusted to account for all Oklahoma physicians in the practice categories mentioned, indicated that approximately 120 in-patients and 86 out-patients were treated for snakebite accidents each year. The difference between the estimate of 120 in-patients treated by physicians and the average of 35 in-patients reported by hospitals can be explained, in part, by the following facts: (1) eight Oklahoma hospitals did not participate in the study; (2) six counties from which physicians reported numerous snakebites did not have hospitals listed in the Hospitals Guide Issue; (3) there was evidence of under-reporting snakebite in-patients from seven hospitals which participated in the study; and (4) physicians indicated that many in-patients were treated in small clinics and hospitals not listed in Hospitals Guide Issue. Taking all of these various reports into consideration, I estimate that approximately 206 (120 in-patients

and 86 out-patients) people are treated annually for poisonous snakebites in Oklahoma. This provides an incidence of 8.85 bites per 100,000 population per year.

Geopathology—The geographical distribution of snakebites reported in Oklahoma during 1958 and 1959 may be seen in figure 3. The lightly shaded counties are those from which hospitals reported in-patients treated for snakebites. An appropriate symbol is used to mark each hospitalized patient who was bitten by a specific kind of snake. The darker shaded counties are those counties from which physicians reported snakebite cases, but from which no cases were reported by hospitals.

Of 66 people hospitalized for snakebite treatment for whom detailed records were available, 37 (56 per cent) were bitten by copperheads, 11 (17 per cent) by rattlesnakes, six (nine per cent) by cottonmouth moccasins, and 12 (18 per cent) by unidentified poisonous snakes.

Figure 3 shows snakebites were reported from all sections of the State. However, snakebites were more frequent in the eastern and central two-thirds of the State than in the western one-third. Copperhead bites occurred only in eastern and central parts of the State. Most cottonmouth moccasin bites happened in the southern part of Oklahoma. On the other hand, most rattlesnake bites were in the western part of the State. The geographical patterns of bites by various kinds of snakes are consistent with the ecological ranges of poisonous snakes in Oklahoma described by Conant.² The only discrepancy is that two of the cottonmouth moccasin bites bordered the western bound-

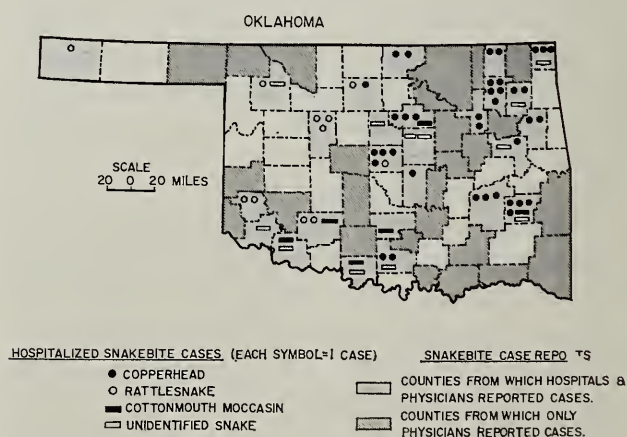


Figure 3

TABLE 1

Seasonal Distribution of Poisonous Snakebites
in Oklahoma, 1958 and 1959

Month	No. Bites	Month	No. Bites
January	0	July	15
February	0	August	14
March	0	September	5
April	7	October	2
May	8	November	0
June	15	December	0

ary described by Conant; however these most likely were true cottonmouth bites.

Temporal Relationships—The monthly distribution of snakebite accidents is shown in table 1. Snakebites were infrequent during the colder months of the year—November, December, January, February and March. In general, snakes are usually inactive or hibernating during the colder months. All the snakebites in Oklahoma occurred from April through October. This striking seasonal distribution of bites coincides with the time that snakes are most abundant and active and with the time that people have greater exposure due to out-of-doors occupations and recreation. Similar “seasonal epidemics” of venomous snakebites have been observed in New England and Florida.^{3, 4}

The time of day when most snakebite accidents happened was the three hour period from 6:00-8:59 P.M. when 18 (27 per cent) persons were bitten. The number of bites by three hour periods of time were: 6:00-8:59 A.M., five bites; 9:00-11:59 A.M., seven bites; 12:00 noon-2:59 P.M., 11 bites; 3:00-5:59 P.M., 11 bites; 6:00-8:59 P.M., 18 bites; 9:00-11:59 P.M., seven bites; and 12:00 midnight- 2:59 A.M., one bite. There

were no bites from 3:00-5:59 A.M. For six cases the time of the bite was not recorded.

Bite Victims—There were 35 white males, 24 white females, four non-white males and three non-white females admitted to Oklahoma hospitals for snakebite treatment during 1958 and 1959. Of the non-whites, three were male and three were female American Indians and one was a Negro male. Using the 1960 census of the population of Oklahoma, the bite rates per 100,000 population were: 3.36 for white males, 3.75 for non-white males, 2.25 for white females and 2.64 for non-white females. Thus, non-whites had higher snakebite rates than whites and males had higher rates than females.

The age distribution of Oklahoma bite victims is shown in table 2. The largest number of bites happened to children and youths 10-19 years of age (21 bites) and those 0-nine years of age (11 bites). Indeed 48 per cent of all snakebites were inflicted on children and young adults less than 20 years of age. Age-specific bite rates are much more meaningful since they take into account the population at risk in a particular age group. The highest biannual bite rates per 100,000 population were: 10-19 years of age (5.19) and 20-29 years of age (3.90). The lowest bite rate was found for people 70 or more years of age.

An analysis of the occupations of the patients showed that 29 were children, 14 were housewives, five were farmers or farm laborers, four were craftsmen, three were operatives, three were unemployed, two were retired, and two were laborers other than farm laborers. One each was a professional, a manager, a sales worker and a zoo worker.

Activity and Place — Ten bites occurred while children were playing outside, seven in their own yards and three elsewhere. An additional eight people were bitten while walking or working in their own yards. Six people were bitten while handling a poisonous snake, four while hunting or fishing, four while engaged in recreation other than hunting or fishing, three while working on a farm, three while working or walking on or near a highway, two while engaged in Army field training and one while working around a barn or hen house. The activity was not stated for the remaining patients.

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The place where the bite occurred is closely related to the activity when bitten. The largest number of snakebites, 15, happened right in the patients' own yards. Seven people were bitten near a lake, river or other body of water, five in a field away from the house, four in the woods, three in or under a building, three on or near a highway, three on a farm not near the house, two in a field adjacent to the house, and one in a hen house. Of the three people bitten in or under a building, one child was bitten in a basement, a herpetologist was bitten at a zoo, and one person was bitten on the porch of his home. The place where the bite took place was not coded for the remaining patients.

Site and Severity—The anatomical sites on human beings where venomous snakes inflicted their bites are shown in table 3. Ninety-seven per cent of the bites were inflicted on the extremities—32 per cent on the upper extremities and 65 per cent on the lower extremities. The fingers and hands were the parts most often bitten on the upper extremities. The feet and lower legs, including the ankles, were the parts most frequently bitten on the lower extremities. The site was not recorded for two patients.

A modification of the clinical classification of pit viper venenation by Wood, Hoback and Green⁵ was used to determine the severity of bites. Bites were classified as follows:

- Grade 0 —No venenation. Fang or tooth marks, minimal pain, less than 1 inch of surrounding edema & erythema. No systemic involvement.
- Grade I —Minimal venenation. Fang or tooth marks, severe pain, 1-5 inches of surrounding edema & erythema in first 12 hours after bite. No systemic involvement usually present.
- Grade II —Moderate venenation. Fang or tooth marks, severe pain, 6-12 inches of surrounding edema & erythema in first 12 hours after bite, systemic involvement may be present—nausea, vomiting, giddiness, shock or neurotoxic symptoms.
- Grade III —Severe venenation. Fang or tooth marks, severe pain, more than 12 inches of surrounding edema & erythema in first 12 hours after bite, systemic involvement usually present as in Grade II.

The severity of venenation (venom poisoning) was classified as follows for 61 hospitalized cases: 19 (31 per cent) were Grade 0; 15 (25 per cent) were Grade I; 18 (29 per cent) were Grade II; and 9 (15 per cent) were Grade III. For the remaining five hospitalized cases the severity of venenation was not stated. There was one death among the 66 hospitalized cases in this series. This provides a case-fatality rate of 1.5 per cent. When one realizes, however, that about 42 per cent of Oklahoma's snakebite victims are treated on an out-patient basis, the true case-fatality rate probably is less than one-half of one per cent. This is confirmed by the fact that there was only one snakebite death in the State from 1950 through 1959.¹ This fatality involved a 67-year-old white farmer who was bitten by an unspecified poisonous snake in May, 1958. He died one day later. Contrary to popular belief, most people do not die within the first few hours following venenation. About 70 per cent of them die 6-48 hours after the bite has occurred.⁶ Rattlesnakes of the genus, *Crotalus* cause more fatalities in the United States than do any other snake. There were no well documented deaths from copperheads in this country from 1950-1959. However, copperheads can cause severe venenations and are potentially lethal.

The paradox of a high incidence of poisonous snakebites with a low case-fatality rate in Oklahoma can be explained by the following facts: (1) there was a high percentage of copperhead bites and a low percentage of rattlesnake bites; (2) prompt medical care

TABLE 2

Age Distribution of Hospitalized Snakebite Victims in Oklahoma, 1958 and 1959			
Age Group (years)	Population at Risk*	No. Bites	Rate per 100,000**
0-9	477,246	11	2.30
10-19	404,526	21	5.19
20-29	281,801	11	3.90
30-39	291,866	4	1.37
40-49	277,427	4	1.44
50-59	248,432	8	3.22
60-69	186,494	6	3.22
70 or more	160,492	1	0.62

*Based on the 1960 Census of the Population of Oklahoma.

**These rates are only on hospitalized patients for whom information was available.

was available to snakebite victims; (3) current snakebite therapy is effective; and (4) bites by poisonous snakes in the United States aren't as lethal as some people once thought—especially with prompt and proper treatment.

TREATMENT

The current treatment of North American pit viper (rattlesnake, cottonmouth moccasin and copperhead) bites includes both minor surgery and medical forms of treatment. A constricting band (tourniquet) should be applied lightly to the involved extremity several inches proximal to the bite. The constricting band should be applied only tight enough to occlude the superficial venous and lymphatic flow. *It should not occlude the arterial circulation* and it should be released every ten to fifteen minutes for a minute or two. As edema from venom poisoning spreads, the constricting band should be advanced to keep just ahead of the swelling. The purpose of the constricting band is to impede the spread of venom until incision and suction can be used to remove the venom mechanically and until antivenin can be administered to neutralize the venom.

Incision and suction (I.S.) is effective in removing venom from experimental animals up to about 120 minutes after the venom is injected. The sooner it is used, the larger the amount of venom that can be removed. Suction should be used for about one hour. We have found the suction cups supplied in the Cutter and the Becton-Dickinson snakebite first-aid kits effective for removing pit viper venom. Incisions, one-quarter inch long and one-eighth to one-quarter inch deep, are made into the subcutaneous tissues over the fang punctures. A few (3-5) additional incisions may be made in the surrounding edematous tissues. A large number of incisions is not needed. Immobilization aids in limiting the spread of venom. However, if one must decide between immobilization or seeking prompt medical treatment, the latter should be sought.

The "3 A's" (antivenin, antibiotics, and tetanus antitoxin or toxoid) are recommended, in addition to I.S., in treating all serious pit viper bites. Antivenin Crotalidae Polyvalent (Wyeth) is effective in neutralizing

TABLE 3

Anatomical Sites of Bites Inflicted by Poisonous Snakes in Oklahoma, 1958 and 1959

Anatomical Site of Bite	Side of Body		Total No. of Bites
	Right	Left	
Head, face and neck	0	0	0
Trunk, front	0	0	0
Trunk, back	0	0	0
Upper arm	0	0	0
Forearm	5	0	5
Hand	6	1	7
Fingers	6	3	9
Upper leg	1	0	1
Lower leg and ankle	12	10	22
Foot	7	9	16
Toes	1	3	4
Not stated	—	—	2

the venoms of all North American pit vipers. It is not protective against coral snake venom. Since antivenin is manufactured from horse serum, the patient should receive a skin test before antivenin is given. For Grade I venenations antivenin may be administered in the deltoid or gluteus muscles. In Grade II and Grade III venenations, antivenin diluted in 1000cc. of normal saline may be given intravenously.⁷ Studies with radioisotopes have shown that antivenin accumulates at the site of the bite more rapidly after intravenous administration than after intramuscular administration.⁸ Injection of antivenin into the local bite area is not a particularly effective way to administer antivenin. We have found the following amounts of antivenin useful in treating the various Grades of venenation: Grade 0 (no venenation) requires no antivenin; Grade I (minimal venenation) may require 10cc. (one ampoule) of antivenin; Grade II (moderate venenation) requires 30-40cc. of antivenin; and Grade III (severe venenation) requires 50cc. or more of antivenin.

Since snakes' mouths and venoms may harbor pathogenic organisms, antibiotics and tetanus antitoxin or toxoid should be given prophylactically. Gram negative organisms predominate, hence a broad spectrum antibiotic is indicated. Penicillin used alone is not adequate treatment.

Cortisone and ACTH do not affect the survival rate of animals poisoned with pit viper venom. These drugs probably should not be used during the first few days after venenation, although they may be beneficial later in treating serum sickness resulting

Ophidiasis / PARRISH

from antivenin therapy. Antihistamines are contraindicated because they decrease the survival time of animals poisoned with pit viper venoms. Shock resulting from venom poisoning should be treated with infusions of blood, plasma, saline solution and vasopressor drugs. Meperidine hydrochloride and other analgesics may be given to relieve pain. Recently there have been reports of excessive tissue necrosis and amputations associated with cold therapy such as packing an extremity in ice or using ethyl chloride.⁸ In my opinion, cold therapy should not be used in treating pit viper bites.

SUMMARY

Oklahoma has the fourth highest annual incidence of ophidiasis (snake venom poisoning) of the states west of the Mississippi River. An estimated 206 (120 in-patients and 86 out-patients) persons are bitten by snakes annually—an incidence of 8.85 bites per 100,000 persons. However, the estimated case-fatality rate was less than one-half of one per cent.

Of 66 in-patients reported in detail by Oklahoma hospitals during 1958 and 1959, 37 (56 per cent) were bitten by copperheads, 11 (17 per cent) by rattlesnakes, six (nine per cent) by cottonmouth moccasins and 12

(18 per cent) by unidentified poisonous snakes. "Seasonal epidemics" of snakebites occurred. All of the bites were inflicted from April through October. June and July were the peak months for bites.

Males had higher bite rates than females and non-whites had higher rates than whites. Forty-eight per cent of the cases were among children and young adults less than 20 years of age. Ninety-seven per cent of the bites were on the extremities—32 per cent on the upper extremities and 65 per cent on the lower extremities. Current snakebite treatment is discussed. □

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YOUR LIABILITY

Q—What should a physician tell the patient when he has found that another doctor has apparently caused an injury to the patient?

A—If, for example, the physician finds that a foreign body such as a sponge or instrument has been left in the patient during surgery, or that the patient suffered an x-ray burn, he has no alternative but to inform the patient of his *medical* findings. A physician, however, should not attempt to evaluate the *legal* liability of his colleague with respect to the patient's injury; nor is the physician usually equipped by a knowledge either of the law or of the circumstances that were present at the time of the injury to determine fault or responsibility.

Control of Blood Pressure in the Surgical Patient

JOHN R. DERRICK, M.D.

The adiunctive use of pressor agents to maintain adequate perfusion pressure is often lifesaving. Temporary use often provides adequate perfusion to permit sufficient time to study and diagnose the cause of patients having low perfusion or shock.

AMONG THE requirements placed upon the surgeon with the development of more and more complicated cardiovascular surgical procedures is that of increasingly stricter maintenance of control of the blood pressure. Adequacy of blood pressure and perfusion pressure to prevent shock in the patient undergoing cardiac or other vascular operation is essential, and it is axiomatic that this adequacy depends upon the vascular bed's correct adaptation to the blood and stroke volumes of the heart. In patients with myocardial diseases, the nature of the disorder itself may preclude sufficient systemic pressure. In such an instance it may be necessary for the surgeon to use a pressor agent to reduce the vascular bed during the critical or hazardous phases of the surgical procedure, and by that means maintain adequate blood and perfusion pressures. Angiotensin amide, or Hypertensin (CIBA), has proved

to be safe and efficacious in circumstances of this sort.

EXPERIENCE WITH THE AGENT

Initially, animal experimentation was tried and hypovolemic shock created in dogs.³ Angiotensin was given and responses to various dosages studied. Subsequently, angiotensin was administered to normal subjects (volunteers) and the times and degrees of response observed. The significant finding from these experiments or others was, of course, that in hypovolemic shock angiotensin can still be absorbed by the peripheral circulation with sufficient rapidity to induce response. From the early studies individualization of dosage was recognized as imperative because of the variable responses obtained. Predetermination of dosage levels was then practiced when the agent was to be used clinically. That is, in a patient for whom a surgical procedure was scheduled, angiotensin was given several times during the preceding days, so the physician would know in advance the amount that would elicit response in a particular patient and which would not precipitate arrhythmias.

In 50 patients the new hypertensive agent was used successfully.² Some of the findings in this series have been previously reported, but on re-study of the responses it has become more apparent than ever that the pharmacologic help during the surgical procedures was of especial value in blood pressure control and in reduction of the possible

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dangers of cardiovascular operative procedures.

Mitral Commissurotomy: Stabilization of the arterial blood pressure is particularly important during the performance of mitral commissurotomy, particularly during manipulation of the valve. Often when the valve is handled the subject's blood pressure will drop to shock levels which precludes further manipulation until the pressure is restored to normal so that coronary and body perfusion will be adequate. This situation means that the surgeon's finger will have to stay in the valve for periods of several minutes for the return of the blood pressure to the original level before he can resume manipulation. In patients with mitral stenosis the recovery to normotensive levels may take three to ten minutes because of fixed cardiac output or weakening of the myocardium from rheumatic involvement, and all of this while the finger is retained in the atrium before manipulation can be again attempted. When angiotensin is used, normotensive pressures can be achieved in a matter of seconds and, since the coronary vessels can be sufficiently perfused, manipulation can be resumed.

It is the practice for the patient's blood pressure to be titrated to a standard solution of the agent while his chest is open. He is given 0.5 mg. of 500 cc of five per cent dextrose in distilled water (a dose level of one gamma per cubic centimeter) in order to ascertain his response to timed administration of a standard amount. When his response is determined, the anesthesiologist can predict the dose level that will be needed during the actual mitral manipulation. Individuals with severe mitral stenosis seem to be less responsive than those with milder disease; however, in the 36 patients of this group, the time for recovery from hypotensive episodes was, with use of the pressor agent, from 15 to 45 seconds only, even in instances of stenosis of great severity.

In the 36 patients studied there were no untoward effects from the angiotensin, no development of arrhythmias and no complications.

Open Heart Procedures: Six patients who had open heart repair procedures subse-

quently failed to maintain satisfactory perfusion pressures, so that angiotensin was utilized to increase the vascular tone. In all six it was possible to elevate the blood pressure to adequate perfusion levels with infusions of the pressor agent. The range of the infusion period in five of the patients was from six to 14 minutes. In one, the agent was infused for 45 minutes. In no case was there any indication of heart block.

In instances of open heart procedures, it has actually seemed that angiotensin affects the musculature of the myocardium directly. Besides the vascular effects of the agent, the heart beat literally seems to be strengthened.

Patent Ductus Arteriosus and Coarctation of the Aorta: Eight patients in this series underwent operation either for patent ductus arteriosus or for coarctation of the aorta. An operative risk exists in elevation of pulmonary artery pressures, so that titrating the patient's blood pressure is a protective measure. The necessary use of vascular clamps can be dangerous, particularly in subjects with arteriosclerosis, but with control of the pulmonary and systemic pressures the application of the clamps can be made safe. It is necessary to keep the blood pressure at hypotensive levels while the divided ductus is sutured or the coarctation is repaired, but when suturing is completed angiotensin can be given to return the pressures to normal levels or to forestall dangerous hypotension. In the eight individuals control was successful and there were no undesirable side-effects from the angiotensin.

DISCUSSION

The absence of untoward effects is a particularly gratifying aspect of this form of

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management of pressures during surgery. No complications, side effects or arrhythmias were noted in 50 patients, all of whom were subjected to the stress of operation and the possibility of shock. Bock has reported that angiotensin, live levarterenol, produces electrocardiographic changes in the T-waves and extrasystoles, while levaterenol alone causes changes in the ST interval.¹ In this series, no changes were seen in the electrocardiograms; however, the dosages employed were less than Bock's and the systemic blood pressures were never raised to levels appreciably higher than normal. It has been a deliberate practice in patients in this series to utilize amounts of the agent that were approximately in the range of the amounts of biologic angiotensin that is liberated in illness or other physiological changes. In the experiments with volunteers and other clinical trials, efforts were made simply to maintain the blood pressure at the normotensive level.^{3, 2} This system probably explains the

absence of electrocardiographic alterations in these patients.

SUMMARY

The hypertensive agent angiotensin has been successfully utilized in 50 patients to control the blood pressure and avert the development of shock during cardiovascular surgery. With moderate dosages, the pressor effect is insufficient to provoke excessive elevations. In no patient were there any arrhythmias or other complications as a result of administration of the agent. □

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YOUR LIABILITY

Q—What procedures, both medical and surgical, may the members of the resident staff of a hospital be allowed to perform on private patients in the absence of the attending physician?

A—A patient has a contractual relationship with his physician. The attending physician may not delegate his duties to another without the consent of the patient. With respect to routine diagnostic procedures and medical treatment, it is the customary understanding between the attending physician and his hospitalized patient that residents and interns will carry out the instructions of the attending physician in his absence. In the event of an emergency, the resident or intern may take such action as is reasonably necessary, if he is unable to reach the attending physician for specific instructions.

A resident should not be permitted to undertake any surgical procedure for which he is not qualified by training or experience. Since modern surgical procedure usually calls for the presence and assistance of a surgical team, a patient's consent to surgery usually carries an implication that the operating surgeon may use the services of a resident as an assistant. If all, or a substantial part of the surgery is to be performed by the resident under the direction or supervision of the attending surgeon, the specific consent of the patient should be obtained in advance, preferably in writing.

Important Functions of the Mast Cell-Basophil Complex

ROBERT L. OLSON, M.D.

Advances in cellular physiology can be expected to advance medicine substantially. Mast cell and basophil physiology has advanced significantly in the recent past.

SINCE EHRLICH'S discovery and description of the mast cell in 1877 there has been persistent intrigue in scientific circles concerning the nature of this cell and its mysterious basophilic granules. Ehrlich considered mast cells to be of two types: tissue mast cells and blood mast cells (basophils). The wisdom of relating these two cells by virtue of their possession of large basophilic metachromatic, cytoplasmic granules was questioned when they were proven to be of different origin. Specifically, the basophil is of myelocytic origin whereas the tissue mast cell is formed at other connective tissue sites. Recent work¹, however, confirms a body-wide physiologic relationship. These cells can no longer be regarded as peculiar variants of white blood cells or connective tissue cells but must be regarded within the physiologic framework of the body.

DEFINITION

The unique identifying feature that distinguishes mast cells from the reticulo-endo-

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thelial-derived histiocyte is the presence of large basophilic, metachromatic staining granules. Metachromasia is a characteristic of high molecular weight polysaccharide-sulfuric acid esters in which the stained substance is a different color than the dye. These granules are released by trauma and certain chemicals. Montagna² defines mast cells as "any connective tissue cell containing cytoplasmic granules that stain metachromatically with toluidine blue." Others consider this definition too broad since histiocytes may engulf released mast cell granules and basophils may occasionally be found in inflammatory tissue. The blood basophil has similar staining granules which distinguish it from polymorphonuclear leucocytes.

LOCATION

Mast cells are a component of connective tissue and are found in connective tissue throughout the body. They tend to be concentrated around structures traversing connective tissue such as blood vessels, hair and mucous glands. They are also present between fat cells and in the connective tissue separating muscle bundles. Mast cells are particularly numerous in areas of rapid regeneration of connective tissue such as healing wounds, scars and keloids. They are also numerous in the connective tissue surrounding many neoplasms, as well as in areas of lymph stasis, *chronic* inflammation and myxedema.

The proportion of basophils in the peripheral blood, with few exceptions, remains remarkably constant.

There is good evidence that the mast cell-basophil complex is important in *wound healing, anticoagulation, lysis of clots, clearance of lipid* from the blood and *allergic reactions*. These functions are largely related to the presence of histamine and heparin in the metachromatic granules. Sections of tissues high in mast cells contain large amounts of these substances. Conversely, heparin or histamine content of a tissue is an index of mast cell content.

It has been demonstrated frequently that mast cell function is related to discharge of the metachromatic granules. Degranulation results from trauma, acute inflammation, certain chemical liberators such as aspirin, polymyxin B, stilbamidine, various alkaloids, reserpin, corticosteroids, thyroid, etc. Of particular interest is the degranulation following the ingestion of a fatty meal and in response to the antigen-antibody reaction.

Wound Healing: Using available data in addition to original work, Riley³ formulated a workable concept of the role of the mast cell in wound healing. The essential features are as follows. Trauma or inflammation results in degranulation. The histamine is loosely held to the granule and is easily released, whereas the heparin is more firmly bound. Histamine activates the fibroblasts which take on the characteristics of a tissue culture after mast cell degranulation. The histamine also causes vascular dilation and increased capillary permeability. The colloidal state thus attained provides suitable conditions for the macrophages to ingest the remainder of the granules (heparin). The heparin is used as an early source of energy. The stimulated connective tissue cells then produce mucopolysaccharide ground substance necessary for wound healing. After the requirements of the healing wound are met, the mast cell ingests mucopolysaccharide secreted by the fibroblast, thus completing the cycle. There is then an increase of

mast cells in the tissue undergoing fibroplasia. This increase in mast cells is noted in all tissues, normal or pathologic, undergoing fibroplasia.

Anticoagulant Action: The function of heparin as an anticoagulant is well known and will not be elaborated on here.

Clot Lysis: Heparin is fibrinolytic *in vitro*. If fibrin or blood clots are implanted in the subcutaneous tissue of a guinea pig, mast cells invade the clot and discharge their granules. After this the clot dissolves.

Lipid Clearing: Following a fatty meal the serum normally becomes cloudy due to the presence of absorbed fat in the form of relatively insoluble lipoproteins (chylomicrons). The chylomicron count normally drops to low levels over a period of hours. Administration of heparin results in a rapid increase in the clearing. The observation of basophil degranulation following a high fat meal⁴ offers strong evidence of the role of the basophil in reducing the chylomicron count. The mechanism of action is believed to be based on the activation of an enzyme lipoprotein lipase by the heparin. Atherosclerotics are noted to have a prolonged elevation of the chylomicron count following a high fat meal. It is thus possible to speculate that atherosclerosis may be related to unresponsive basophils. Preliminary studies suggest this relationship.

Basophils and allergy: The eosinophil has long been implicated as the allergic cell. It is now well established, however, that the eosinophil appears in response to histamine release from the mast cell or the basophil. A more likely function for the eosinophil, therefore, may be as an antihistamine or antiallergic cell.

The following evidence supports the above relationship: (1) about one-half of the blood histamine is in the basophils, one-third in the eosinophils, and the remainder in the remaining blood elements⁵. Considering the relatively small proportion of eosinophils and basophils in the blood, these cells are implicated in the metabolism of histamine; (2) intradermal injections of histamine result in marked eosinophilia⁶; (3) rubbing mast cell tumors results in an eosinophilic infiltration. Non-traumatized mast cell tumors have a paucity of eosinophils; (4) pre-treatment of animals with mast cell degranulators or a

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high fat meal gives the animals partial protection against anaphylaxis;⁷ (5) anaphylactically sensitized rabbits revealed a complete absence of basophils in the peripheral blood at five and thirty minutes after the eliciting dose;¹ (6) immunizations of a rat with horse serum results in a large increase of histamine in the peripheral blood;⁸ (7) progressive degranulation of basophils may be observed by serially drawn blood samples from an anaphylactically sensitized animal.⁷

Shelley and Juhlin,⁷ using the principle of progressive degranulation of basophils in allergic sensitivity, have devised an *in vitro* test. The patient's serum is mixed with rabbit basophils (since rabbit blood contains a high percentage of basophils in contrast to humans). The suspected allergin is then added to the serum-basophil mixture. Basophilic degranulation occurs in a positive test. This test is particularly valuable for drug allergies. The standard intradermal and conjunctival tests are not only unreliable

but dangerous in drug allergies. It is possible that this test will soon become widely available for the diagnosis of drug allergies.

SUMMARY

The mast cell-basophil complex is dynamically concerned with a variety of physiologic processes including wound healing, allergic reactions, fat transport and clot lysis.

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ABSTRACT

BENEFITS OF EXERCISE

In this article the authors report data on sedentary physicians and medical students in which a work capacity test was done. They were compared to a group of formerly well trained athletes who continued to exercise. Serum cholesterol determinations were also done. The maximum work capacity test consists of walking at a 3.4 mph. pace on a one per cent treadmill grade. The grade is raised one per cent per minute with the speed held constant. Walking was terminated at a pulse of 180 or the onset of severe symptoms of dyspnea, fatigue or claudication. Blood was obtained both before and after the test for cholesterol determinations. The untrained sedentary group reached its peak performance on the average after 13.5 minutes with a slope of 13.5 per cent. Subjects who had participated in some form of vigorous athletic activities and had maintained weekly to bi-weekly physical exercise reached a peak load at 18 per cent. After training, six sedentary subjects went from an average of 12 per cent to 20 per cent slope.

Cholesterol studies showed in general a higher basal level in the sedentary group. Basal cholesterol levels were significantly lowered in these subjects after training. There was a less significant difference between the cholesterol of the sedentary group and those of

active individuals although the active group had a lower average cholesterol.

EDITOR'S NOTE. More evidence on the benefits of exercise in addition to another factor in the evaluation of the cholesterol level.

Physical Walking Capacity in Medical Personnel and the Response of Serum Cholesterol to Acute Exercise and to Training, John Naughton, M.D., and Bruno Balke, M.D., American Journal of Medical Sciences 247: 286, Mar., '64.

RECENT PUBLICATIONS

The Journal welcomes the opportunity to list current publications by any Oklahoma physician.

A Comparative Clinical Study of Methyclothiazide and Pargyline in Patients with Essential Hypertension, Nattoo Patel, David C. Mock, Jr., John P. Colmore, and Mervin L. Clark, Clinical Pharmacology and Therapeutics, 4: 740-748, Nov.-Dec., 1963.

Sex Linked Electrophoretic Difference in Glucose-6-phosphate Dehydrogenase, N. H. Kirkman, and E. M. Hendrickson, Am. J. Human Genetics, 15: 241, 1963.

Reprints of the above publications are usually available on request from the senior author, c/o Mrs. Joan Campbell, Veterans Administration Hospital, 921 N.E. 13th Street, Oklahoma City, Oklahoma.

Dean's Message

In 1947, during an emergency, President George L. Cross asked me to undertake, temporarily, the duties of the Dean of the School of Medicine. I need not tell you that I embraced this opportunity with considerable hesitation, not from lack of devotion to the University, but because I had little administrative experience and major problems loomed ahead. The School of Medicine had been on probation with the American Medical Association and the Association of American Medical Colleges for a dozen years and, outside of the faculty, there appeared to be apathy concerning the situation. Furthermore there was very little interrelated organization of the medical school, the faculty and the University Hospitals. Most inadequate provision of finances or facilities prevailed, and awaiting immediate solution was the delicate requirement to initiate a full-time clinical faculty, while doing one's utmost to retain the interest and assistance of loyal, highly motivated, volunteer faculty members whose friendship I had enjoyed some years.

The road ahead looked difficult but I knew the school had to emerge from probation if it were to survive. Within a very few months needed support by way of a temporary lifting of the probationary status was forthcoming, and subsequently President Cross asked me to continue to serve as Dean.

Now it is 1964, and last year our school received an unusually laudatory commenda-

tion which recognized remarkable progress and an outstanding faculty of quality and unique cooperative spirit. When I read the report of the accrediting group, I knew that an era had come to a close and that an even greater one was beginning—an era that would require fresh administrative talent to deal at length with new aspects of the institution's development.

The years ahead cannot fail to witness many new and worthwhile accomplishments at our medical center, with one proviso, the continued interest and support of alumni, physicians, legislators, University authorities, state officials, the State Regents for Higher Education and the outstanding civic leaders who have so generously aided us in the past.

Unknown to you, during my tenure as Director and Dean the assistance and advice which many of you gave to me personally permitted me to retain a young man's image of the importance of medical education and to know the strength of your dedication to alleviating the ills of humanity. This is to me an image which I see though my eyes be closed or as a song I would hear without ears.

If I may have been regarded in one sense as the head of this medical family for 17 years, sharing its life and sustained by its affection, it constitutes a very full reward for my long and sometimes anxious labors.

Mark R. Everett

ANNUAL MEETING HIGHLIGHTS

Six hundred members of the Oklahoma State Medical Association attended the 1964 Annual Meeting held in Oklahoma City's Skirvin Hotel, May 1st through May 3rd.

The meeting, advertised to the membership as "Renaissance '64," lived up to its billing, since a number of innovations were presented. First, the tradition of a one-day marathon meeting of the House of Delegates was broken, and the ever-increasing volume of business was handled in two half-day sessions on May 1st and 2nd, separated by evening meetings of reference committees on May 1st.

Splitting the session released Delegates to attend the afternoon portions of the scientific program, a program which also marked a departure from the normal format.

General Chairman R. R. Hannas, Jr., M.D., OSMA vice-president from Sentinel, and the Program Committee chaired by Irwin H. Brown, M.D., Oklahoma City, arranged Friday and Saturday afternoon meetings according to general subject areas, and the individual presentations afforded continuity not present in previous scientific programming.

"Blood Pressure Mechanisms" was the topic for the Friday afternoon meeting, and "Applied Basic Advances" filled the bill for Saturday afternoon. Saturday morning's scientific program featured informal "Shirtsleeve Sessions" on common dermatological problems, diagnostic radiology, clinical laboratory tests and office gynecology. Scientific Motion Picture clinics were conducted Friday morning.

As another innovation, more Oklahoma speakers were employed than usual, with particular emphasis on



Reverend Armend D. Jorjorian, Chaplain of St. Luke's Episcopal Hospital, Houston, addresses an estimated four hundred persons attending the First Annual Peter E. Russo Conference on Medicine and Religion, held on May 3rd in conjunction with the OSMA's 58th annual meeting in Oklahoma City.

faculty members of the University of Oklahoma School of Medicine.

Thomas Installed

At Saturday night's Inaugural Dinner-Dance, Harlan Thomas, M.D., Tulsa, succeeded Joe L. Duer, M.D., Woodward, as President of the Oklahoma State Medical Association. The inaugural dinner was preceded by an association-wide social hour and reception, and was followed by the annual dance featuring nationally-known Joe Reichman and his orchestra. Three hundred attended the inauguration.

Tribute was also paid to Mark R. Everett, Ph.D., retiring medical school dean, when Tom C. Points, M.D., Oklahoma City, presented Doctor and Mrs. Everett with appreciation gifts during the inaugural dinner ceremonies.

Other officers elected and installed at the 58th Annual OSMA Meeting were: Rex E. Kenyon, M.D., Oklahoma City, president-elect of the OSMA; R. R. Hannas, Jr., M.D., Sentinel, vice-president (re-elected); Bob J. Rutledge, M.D., Oklahoma City, secretary-treasurer; C. M. Hodgson, M.D., Kingfisher, speaker of the House of Delegates; Worth M. Gross, M.D., Tulsa, vice-speaker; Wilkie D. Hoover, M.D., Tulsa, OSMA delegate to the American Medical Association (re-elected); and, Francis A. Davis, M.D., Shawnee, alternate delegate to the AMA (re-elected).

The Board of Trustees re-appointed C. B. Dawson, M.D., Oklahoma City, to another term as Editor-In-Chief of the OSMA *Journal*.

Complete Annual Meeting Proceedings begin on page 277.

Hart Remembered

Delegates paid special tribute to the memory of Marshall O. Hart, M.D., former speaker of the House of Delegates, who passed away April 12th while attending the annual convention of the American Academy of General Practice in Atlantic City.

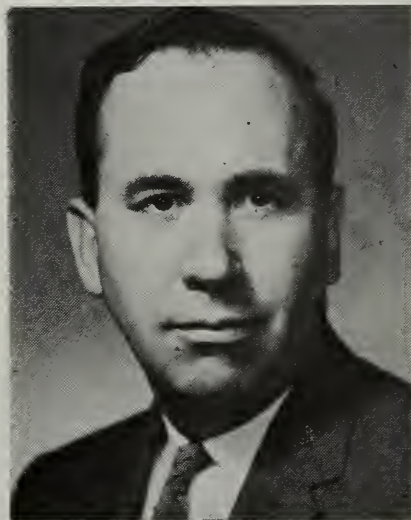
(Continued on Page 270)

Twelve Points Stressed For 1964-65 Program

Project priorities have been established by incoming OSMA president Harlan Thomas, M.D., for the organizational year of 1964-65.

In his program message to council and committee chairman, the Tulsa general practitioner observed that no other statewide organization has more public responsibilities and broader fields of interest than does the OSMA, but he pointed out that the association is attempting to meet mushrooming 1964 problems—scientific, social, economic, political and governmental developments—with the same administrative strength as in the 1940's.

"Until there can be realized a modernization of the OSMA's administrative and staff capabilities," he



HARLAN THOMAS, M.D.

said, "and until even better *esprit de corps* can be generated throughout the profession, the only practical approach to an annual program demands the establishment of priorities . . . we must recognize our inability to tilt with every windmill."

Projects for priority consideration are:

- Continued, vigorous opposition to Medicare-type legislation.
- Increased OSMA endorsement and assistance to the Oklahoma Medical Political Action Committee.
- Improved and expanded association activities in the field of state legislation.
- Better public relations, individ-

ually and collectively, including a greater sense of association responsibility for the wayward doctor, the cost of medical care and the public image of the profession. Thomas: "The image of a profession which is working for the public good is ours to build, nourish and maintain in truth."

• The realization of fair rates of compensation under the Kerr-Mills Program, and continued efforts to convert the program to a system of prepaid health insurance.

• An intensive professional education program designed to reduce unwarranted malpractice claims.

• A better informed profession in the affairs and goals of organized medicine.

• The maintenance of high-quality medical care through postgraduate education.

• Improved relationships and harmony with other professional and ancillary organizations.

• Accelerated activity in the field of mental health, to include widespread physician participation in realizing better facilities and methods for treating mental illness.

• Closer liaison with the medical school, toward the goal of assuring the public of the kind, amount and quality of medical care it expects and deserves.

• Improvement of the internal efficiency of the OSMA by recodifying the constitution and bylaws and by modernizing administrative capabilities.

"The 1964-65 organizational year begins with a recognition of almost overwhelming responsibilities," Thomas said, "and a practical realization that available manpower will have to be focused on certain priority projects to the limitation and perhaps exclusion of other worthwhile projects. The association will excel or fail in direct ratio to the interest and volunteer effort of the membership. We approach our many responsibilities with a high degree of optimism that the effort will be there." □

A resolution paying respect to his many contributions to organized medicine and expressing sympathy to members of the family was approved and transmitted to Mrs. Hart.

400 Attend Medicine and Religion Conference

The "First Annual Peter E. Russo Memorial Conference on Medicine and Religion" was held Sunday morning in the Skirvin Tower's Persian Room, and drew an audience of four hundred physicians and wives, ministers, para-medical personnel, non-professional church leaders, and interested members of the general public.

Conducted in memory of the late Doctor Peter Russo, who died shortly before his inauguration as OSMA president in 1963, the project was planned by the OSMA Committee on Medicine and Religion, under the direction of Allen E. Greer, M.D., chairman from Oklahoma City.

Featured speakers included: Milford O. Rouse, M.D., Dallas, Speaker of the AMA's House of Delegates and Chairman of the AMA Medicine and

Religion Committee; Rev. Dr. Paul B. McCleave, Chicago, Director of the AMA Department of Medicine and Religion; and Rev. Armen D. Jorjorian, Chaplain of St. Luke's Episcopal Hospital in Houston.

Because of the exceptional public and professional acceptance of the event, it is anticipated that Doctor Greer's Committee will conduct similar public information functions in connection with its future efforts to establish medicine and religion liaison committees at the county and community levels.

Other Events

In typical fashion, the main portions of the annual convention provided an umbrella for many other related activities of organized medicine in Oklahoma.

- The Oklahoma Medical Political Action Committee held its annual meeting and sponsored an open luncheon featuring Blair J. Henningsgaard, M.D., Astoria, Oregon, National Director of the American Medical Political Action Committee.

- OSMA's annual golf tournament, played at Twin Hills Country Club on Friday afternoon, was won by E. H.

Kalmon, M.D., Oklahoma City, who won a playoff with George H. Ladd, M.D., Oklahoma City, for low gross honors after the pair had tied with 74's. Blind bogey winners were Jack P. Myers, M.D., Okmulgee, James W. Murphree, M.D., Ponca City, and Walter Wicker, Jr., M.D., Lawton. Doctor Kalmon received a handsome trophy and golf bag, presented to him at the dinner-dance, and other winners received valuable prizes from William J. Dowling, M.D., Oklahoma City, golf chairman. There were thirty-eight contestants.

- Forty technical exhibitors displayed their goods and services to Oklahoma physicians. In addition, ten institutional exhibits were presented.

- OSMA past-presidents gathered for their annual breakfast meeting sponsored by the Oklahoma Medical Research Foundation.

- Ten specialty society meetings were held in conjunction with the OSMA event.

Business Actions

The efficiently conducted House of Delegates meeting produced the following major actions resulting from

Former OSMA Presidents Assemble



The traditional annual breakfast meeting of past-presidents of the Oklahoma State Medical Association was held on Saturday morning, May 2nd, at the Oklahoma Medical Research Foundation building, Oklahoma City.

Seated, left to right, are: Bruce R. Hinson, M.D., Enid (1954-55), Joe L. Duer, M.D., Woodward (1963-64), Leonard P. Eliel, M.D., medical director of the research foundation (host), T. H. McCarley, M.D., McAlester (1933-34), and E. S. Lain, M.D., Oklahoma City (1924-25). Standing, left to right, are: J. Hoyle Carlock, M.D., Ardmore (1962-63), John F. Burton, M.D., Oklahoma City (1957-58), Louis H. Ritzhaupt, M.D., Guthrie (1935-36), C. E. Northcutt, M.D., Ponca City (1948-49), Clinton Gallaher, M.D., Shawnee (1961-62), Paul B. Champlin, M.D., Enid (1947-48), R. Q. Goodwin, M.D., Oklahoma City (1955-56), E. C. Mohler, M.D., Ponca City (1958-59), George H. Garrison, M.D., Oklahoma City (1949-50), Charles R. Rountree, M.D., Oklahoma City (1944-45), and Henry K. Speed, M.D., Sayre (1938-39).

consideration of ten reports and thirty-two resolutions:

- *Crippled Children's Pay*: The House reaffirmed its 1963 request that physicians be paid for professional services rendered under the Crippled Children's Act (the law is permissive, but funds must be obtained by the Department of Public Welfare).

- *Professional Liability Insurance*: Taking note of the increase in unwarranted claims against OSMA members, and spiralling costs of settlements and defense, the House approved a recommendation for an intensive educational campaign, based principally upon regional meetings in the trustee districts.

- *Kerr-Mills Program*: For the second straight year, delegates recommended the conversion of the Kerr-Mills health care programs for the indigent to a system of prepaid health insurance, using Blue Cross-Blue Shield or another competent insurance carrier as administrator. A resolution recommending complete withdrawal from participation in the program was turned down.

- *Grievance Committee*: Multiple recommendations were received and approved for the strengthening of the disciplinary machinery of the association, specifically calling for amendments to the sections of the bylaws covering the operation of the Grievance Committee.

- *Areawide Hospital Planning*: Delegates voiced strong disapproval of the areawide hospital planning proposal sponsored jointly by the American Hospital Association and the U.S. Public Health Service. However, the House accepted the plan of the Oklahoma Hospital Association to establish a central clearing house of information on health facilities planning, to be used voluntarily by communities or hospitals considering new hospital construction, expansion or renovation. Acceptance of this project was conditioned by an amendment calling for equal representation for the OSMA on the controlling board of the proposed service.

- *Mental Health*: A comprehensive policy statement on mental health was submitted to the House of Delegates by the Association's Mental Health Committee and approval was granted with certain amendments. The policy, termed "New Action For Mental Health In Oklahoma," set basic OSMA guidelines in dealing with sixteen specific areas of mental health activity.

- *Scholarships and Loans*: Authorization was granted to convert the OSMA Loan and Scholarship Program to non-profit, charitable corporation status, to qualify it for tax deductible contributions.

- *Staff and Dues*: Although recognizing the need for additional staff, the delegates disapproved a proposal to raise the annual dues for the purpose of hiring a physician as Executive Vice-President. Instead, the problem of improving personnel strength at the OSMA Executive Office was referred to the Board of

Trustees.

- *Workmen's Compensation*: A resolution was adopted calling for the Joint action of the OSMA, the legislature and the Oklahoma Bar Association to explore abuses of the present system of disability evaluations for workmen's compensation purposes and to formulate necessary improvements in the operation of the State Industrial Commission.

- *Professional Corporations*: Delegates memorialized the Oklahoma Congressional Delegation to clarify the tax status of Professional corporations by supporting certain legislative bills designed to prevent further discrimination against self-employed persons by the Internal Revenue Service.

- *Medical Education*: Several proposals were adopted on the subject of improving the faculty and curriculum requirements at the University of Oklahoma School of Medicine. □

Scholarship Program Begins in Tulsa

The Tulsa County Medical Society today announced plans to award annual scholarships with an aggregate value of \$2,500 to Tulsa County students of medicine, dentistry, nursing, pharmacy and allied medical sciences.

The program is financed by a grant of \$31,500 from surplus income of the mass immunization for poliomyelitis conducted last year by the Medical Society.

Recipients of the first series of scholarships will be announced in July. Applications are now being received and must be on file by July 1, 1964. The selection of winners will be made with consideration for financial need and scholastic ability.

Administration of the program has been vested in a separate legal trust fund known as the Scholarship Fund of the Tulsa County Medical Society, managed by a committee of five physicians elected annually. William M. Benzing, Jr., M.D., has been named Chairman of the Fund, with Walter E. Brown, M.D., Francis W. Pruitt,

M.D., Worth M. Gross, M.D., and Harlan Thomas, M.D., as trustees.

Applicants for scholarships must be presently enrolled, or have been accepted for enrollment, in a recognized school of medicine, dentistry, pharmacy, nursing, physical therapy, x-ray or laboratory technology or other medical science. The program is not applicable to undergraduate or pre-medical instruction. Applicants must be residents of Tulsa County, or if non-resident, must be enrolled in a training school of a Tulsa hospital.

Doctor Benzing said the number and amount of individual scholarships would vary from year to year in accordance with need and demand. "The Fund has been established on a self-depleting basis, and we presently contemplate the distribution of \$2,500 each year," he stated.

The Tulsa County Medical Society last year gave all surplus income from the polio program, amounting to \$92,500, to 23 charities, scholarship programs and youth organizations. □



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You and your family benefit from Oklahoma REC electricity, too. Because electric cooperatives are working out in the country, providing power for Oklahoma's food and fiber producers, your wife buys more food of better quality for less money at her supermarket. And you, better than most people, know that the food on your table is fresher, cleaner, healthier, because REC electricity makes modern refrigeration and sanitation possible.

The next time you drink a glass of pure milk, eat a sizzling steak, enjoy a weekend at an isolated lakeside cabin with lights, refrigeration and modern plumbing, or stop for gas at a filling station far from other power sources, remember . . .

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THOMAS NAMES COUNCILS, COMMITTEES

The president of the Oklahoma State Medical Association, Harlan Thomas, M.D., Tulsa, has announced tentative appointments to the various Councils and Committees of the association.

Under the organizational structure outline in the OSMA bylaws, the association activities are administered by Standing Committees, Councils and Special Committees. The responsibilities of Standing Committees are outlined in the bylaws, while Councils and Special Committees are given special assignments in accordance with the directives of the House of Delegates and Board of Trustees. In addition, the Councils and Committees are largely responsible for implementing the program of the President.

Council chairmen will be asked to hold organizational meetings as soon as possible, at which time the program assignments will be outlined and the possible appointment of additional committees will be discussed.

The president is asking the chairmen of councils and committees to only hold meetings on the first two week-ends of each month in an effort to conserve time of participating physicians. Council meetings are to be established on a bimonthly basis, with the committees assigned to each council meeting on alternate months.

The following individuals have been asked to serve in the stated capacities:

Standing Committees

EXECUTIVE

Harlan Thomas, M.D., Tulsa, Chairman
Rex E. Kenyon, M.D., Oklahoma City
Joe L. Duer, M.D., Woodward
Wilkie D. Hoover, M.D., Tulsa
Malcom E. Phelps, M.D., El Reno
R. R. Hannas, M.D., Sentinel
Bob J. Rutledge, M.D., Oklahoma City
C. M. Hodgson, M.D., Kingfisher

CONSTITUTION AND BYLAWS

George H. Garrison, M.D., Oklahoma City, Chairman (3 years)
C. M. Hodgson, M.D., Kingfisher (3 years)
Y. E. Parkhurst, M.D., Oklahoma City (2 years)
Thomas C. Points, M.D., Oklahoma City (2 years)
R. R. Hannas, M.D., Sentinel (1 year)
William M. Benzinger, M.D., Tulsa (1 year)

CREDENTIALS

C. Riley Strong, M.D., El Reno, Chairman (1 year)
R. G. Obermiller, M.D., Woodward (1 year)

Samuel R. Turner, M.D., Tulsa (2 years)
Ray V. McIntyre, M.D., Kingfisher (2 years)
W. R. Cheatwood, M.D., Duncan (3 years)
Thurman Shuller, M.D., McAlester (3 years)

GRIEVANCE

A. T. Baker, M.D., Durant, Chairman
Walter E. Brown, M.D., Tulsa
Clinton Gallaher, M.D., Shawnee
J. Hoyle Carlock, M.D., Ardmore
Joe L. Duer, M.D., Woodward

ANNUAL MEETING PLANNING COMMITTEE

Howard A. Bennett, M.D., Tulsa, Chairman (3 years)
Irwin H. Brown, M.D., Oklahoma City (3 years)
R. R. Hannas, M.D., Sentinel (2 years)
James W. Murphree, M.D., Ponca City (2 years)
Francis R. First, M.D., Checotah (1 year)
C. S. Lewis, M.D., Tulsa (1 year)
Jerry Sisler, M.D., Tulsa (1 year)

Councils and Committees

COUNCIL ON INSURANCE

Dave B. Lhevine, M.D., Tulsa, Chairman
Nolen L. Armstrong, M.D., Oklahoma City
Jack D. Fetzer, M.D., Woodward
C. E. Woodard, M.D., Drumright
E. C. Mohler, M.D., Ponca City
C. Alton Brown, M.D., Oklahoma City
Donald L. Brawner, M.D., Tulsa

COUNCIL ON PROFESSIONAL EDUCATION

R. R. Hannas, M.D., Sentinel, Chairman
Howard A. Bennett, M.D., Tulsa
E. E. Shircliff, M.D., Oklahoma City
Roger Reid, M.D., Ardmore
S. N. Stone, Jr., M.D., Oklahoma City
Donald L. Brawner, M.D., Tulsa
Irwin H. Brown, M.D., Oklahoma City
Orange M. Welborn, M.D., Ada
Wendell L. Smith, M.D., Tulsa
Cleve Beller, M.D., Tulsa
B. C. Chatham, M.D., Chickasha

Financial Aid to Education Committee

Joe L. Duer, M.D., Woodward, Chairman
J. Hoyle Carlock, M.D., Ardmore
Rex E. Kenyon, M.D., Oklahoma City
Clinton Gallaher, M.D., Shawnee
Harlan Thomas, M.D., Tulsa

Medical School Liaison Committee

Vernon D. Cushing, M.D., Oklahoma City, Chairman (3 years)
Ollie McBride, M.D., Ada (3 years)
S. N. Stone, Jr., M.D., Oklahoma City (2 years)
Wayne Starkey, M.D., Altus (2 years)
Joe L. Duer, M.D., Woodward (2 years)
R. R. Hannas, M.D., Sentinel (1 year)
Cecil R. Stansberry, Jr., M.D., Oklahoma City (1 year)

COUNCIL ON INTERPROFESSIONAL RELATIONS

Orange M. Welborn, M.D., Ada, Chairman
Frank W. Clark, M.D., Ardmore
Francis R. First, M.D., Checotah
Francis A. Davis, M.D., Shawnee
Maxwell A. Johnson, M.D., Tulsa
Port Johnson, M.D., Muskogee
Elmer Ridgeway, Jr., M.D., Oklahoma City
Joe L. Duer, M.D., Woodward
Allen E. Greer, M.D., Oklahoma City

Medical-Legal Relations Committee

Port Johnson, M.D., Muskogee, Chairman
Kieffer Davis, M.D., Bartlesville
E. F. Lester, M.D., Oklahoma City
William T. Snoddy, M.D., Oklahoma City
Myra Peters, M.D., Tulsa
David Ramsay, M.D., Ada

Medicine and Religion Committee

Allen E. Greer, M.D., Oklahoma City, Chairman
L. J. Starry, M.D., Oklahoma City
Elvin M. Amen, M.D., Bartlesville
E. C. Mohler, M.D., Ponca City
Marcus S. Barker, M.D., Oklahoma City
E. N. Lubin, M.D., Tulsa

Committee on Nursing

Francis Pruitt, M.D., Tulsa, Chairman
C. Cody Ray, M.D., Pawhuska
William R. Cheatwood, M.D., Duncan
J. Walker Morledge, M.D., Oklahoma City

Committee on Osteopathy

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Irwin H. Brown, M.D., Oklahoma City
Bob J. Rutledge, M.D., Oklahoma City
Lloyd A. Owens, M.D., Oklahoma City
Vernon D. Cushing, M.D., Oklahoma City
John E. Highland, M.D., Miami
Wendell L. Smith, M.D., Tulsa
Tom C. Sparks, M.D., Ardmore
James H. Tisdal, M.D., Clinton
Thomas C. Points, M.D., Oklahoma City

Committee on Pharmacy

Joe L. Duer, M.D., Woodward, Chairman
John F. Burton, M.D., Oklahoma City
R. Q. Goodwin, M.D., Oklahoma City
Herbert S. Orr, M.D., Tulsa
J. R. Smithson, M.D., Dewey

COUNCIL ON PUBLIC HEALTH

Hayden H. Donahue, M.D., Norman, Chairman
J. Walker Morledge, M.D., Oklahoma City
George H. Guthrey, M.D., Oklahoma City
John W. Records, M.D., Oklahoma City
Robert L. Loftin, M.D., Broken Bow
Avery B. Wight, M.D., Enid
Joe M. Parker, M.D., Oklahoma City
Nolen L. Armstrong, M.D., Oklahoma City
Gifford H. Henry, M.D., Tulsa
Don H. O'Donoghue, M.D., Oklahoma City
William H. Reiff, M.D., Oklahoma City
Kirk T. Mosley, M.D., Oklahoma City
John X. Blender, M.D., Cherokee
Robert K. Endres, M.D., Tulsa
C. Frank Knox, M.D., Tulsa
Francis A. Davis, M.D., Shawnee
Howard B. Shorbe, M.D., Oklahoma City

Cancer Committee

Joe M. Parker, M.D., Oklahoma City, Chairman
Ira O. Pollock, M.D., Oklahoma City
John F. Simon, M.D., Alva
Leonard P. Eliel, M.D., Oklahoma City
William F. Thomas, M.D., Tulsa
Adolph N. Vammen, M.D., Tulsa
James W. Murphree, M.D., Ponca City
Roger Reid, M.D., Ardmore

Disaster Medical Care Committee

Gifford H. Henry, M.D., Tulsa, Chairman
William H. Reiff, M.D., Oklahoma City

Maternal Mortality Study Committee

John W. Records, M.D., Oklahoma City, Chairman
Jed E. Goldberg, M.D., Tulsa
Earl R. Muntz, M.D., Ada
James A. Merrill, M.D., Oklahoma City
B. C. Chatham, M.D., Chickasha
John W. Shackelford, M.D., Oklahoma City
Earl M. McBride, M.D., Oklahoma City

Mental Health Committee

George H. Guthrey, M.D., Oklahoma City, Chairman
Joe E. Tyler, M.D., Tulsa
Frank L. Adelman, M.D., Enid
Loraine Schmidt, M.D., Norman
Ralph Smith, M.D., Oklahoma City
J. Walker Morledge, M.D., Oklahoma City
William T. Holland, M.D., Tulsa
Thomas L. Foster, M.D., Ponca City
James G. Coldwell, M.D., Tulsa
Ernest G. Shadid, M.D., Norman
Roy J. Doty, M.D., Ada

Perinatal Problems Committee

Farris W. Coggins, M.D., Oklahoma City, Chairman
John W. Shackelford, M.D., Oklahoma City
Hall Ketchum, M.D., Tulsa
Billy R. Goetzinger, M.D., Oklahoma City
John W. Records, M.D., Oklahoma City
George H. Garrison, M.D., Oklahoma City
Thomas C. Points, M.D., Oklahoma City
Raymond F. Hain, M.D., Oklahoma City
Charles L. Freed, M.D., Oklahoma City

COUNCIL ON PUBLIC POLICY

Rex E. Kenyon, M.D., Oklahoma City, Chairman
Vernon D. Cushing, M.D., Oklahoma City
Worth M. Gross, M.D., Tulsa
David Carson, M.D., Fairland
E. H. Shuller, M.D., McAlester
Mark D. Holcomb, M.D., Enid
Louis H. Ritzhaupt, M.D., Gurthrie
R. Q. Goodwin, M.D., Oklahoma City
Thomas C. Points, M.D., Oklahoma City
Charles Johnson, M.D., Bartlesville
E. K. Norfleet, M.D., Bristow
Paul B. Lingenfelter, M.D., Clinton
M. H. Newman, M.D., Shattuck

State Legislative Committee

Thomas C. Points, M.D., Oklahoma City, Chairman
Hayden H. Donahue, M.D., Norman
David C. Ramsay, M.D., Ada
John A. Blaschke, M.D., Oklahoma City

COUNCIL ON SOCIO-ECONOMIC ACTIVITIES

E. M. Gullatt, M.D., Ada, Chairman
E. H. Shuller, M.D., McAlester
B. C. Chatham, M.D., Chickasha
Kenneth L. Wright, M.D., Ardmore
C. Riley Strong, M.D., El Reno
Ann K. Kent, M.D., Muskogee
Stanley R. McCampbell, M.D., Oklahoma City
George H. Garrison, M.D., Oklahoma City
Wilkie D. Hoover, M.D., Tulsa
John E. Highland, M.D., Miami
Joe L. Duer, M.D., Woodward
Kieffer D. Davis, M.D., Bartlesville
Edwin A. McGrew, M.D., Norman
Paul Bischoff, M.D., Tulsa

Crippled Children's Study Committee

C. Riley Strong, M.D., El Reno, Chairman
G. R. Russell, M.D., Tulsa
Thurman Shuller, M.D., McAlester
A. T. Baker, M.D., Durant
Robert P. Holt, M.D., Oklahoma City
Edward W. Bank, Jr., M.D., Enid

Occupational Medicine Committee

Kieffer D. Davis, M.D., Bartlesville, Chairman
Wilkie D. Hoover, M.D., Tulsa
William Best Thompson, M.D., Oklahoma City
Charles M. O'Leary, M.D., Oklahoma City
Carl Nau, M.D., Oklahoma City
John R. Scott, M.D., Oklahoma City
Ira D. Langdon, M.D., Tulsa
Earl McBride, M.D., Oklahoma City
John A. Blaschke, M.D., Oklahoma City
Robert L. Lembke, M.D., Ponca City
John R. Stacy, M.D., Oklahoma City

Public Welfare Committee

E. M. Gullatt, M.D., Ada, Chairman
E. H. Shuller, M.D., McAlester
B. C. Chatham, M.D., Chickasha
Stanley R. McCampbell, M.D., Oklahoma City
George H. Garrison, M.D., Oklahoma City
Thomas W. Taylor, M.D., Tulsa

Prepaid Medical Care Committee

Paul Bischoff, M.D., Tulsa, Chairman
Kenneth L. Wright, M.D., Ardmore
J. B. Eskridge, III, M.D., Oklahoma City
E. K. Norfleet, M.D., Bristow
Frank H. Austin, M.D., Lawton

Proceedings of the 58th Annual Session of the House of Delegates of the Oklahoma State Medical Association

OPENING SESSION

The 58th Annual Session of the House of Delegates of the Oklahoma State Medical Association was called to order at 9:00 a.m. by C. M. Hodgson, M.D., Speaker of the House of Delegates, on Friday, May 1st, 1964, in the Garden Room of the Huckins Hotel, Oklahoma City, Oklahoma.

The Credentials Committee Chairman, C. Riley Strong, M.D., El Reno, declared a quorum present.

Invocation was given by Ray V. McIntyre, M.D., Kingfisher.

The following working committees were appointed by the Speaker of the House of Delegates:

Credentials Committee

C. Riley Strong, M.D., Chairman
R. G. Obermiller, M.D.
Samuel R. Turner, M.D.

Sergeants-at-Arms

F. W. Hollingsworth, M.D., Chairman
Edwin Pointer, M.D.
C. B. Cunningham, M.D.
John M. Moore, M.D.

Tellers

Earl M. Lusk, M.D., Chairman
Cecil R. Stansberry, Jr., M.D.
Rex W. Daugherty, M.D.
John R. Reid, Jr., M.D.

Reference Committee No. I

E. K. Norfleet, M.D., Chairman
Nolen L. Armstrong, M.D.
Glen L. Berkenbile, M.D.
Herbert S. Orr, M.D.
Craig S. Jones, M.D.
Recording Secretary: Don Blair

Reference Committee No. II

Francis A. Davis, M.D., Chairman
Samuel R. Turner, M.D.
W. A. Matthey, M.D.
Louis H. Ritzhaupt, M.D.
Vernon D. Cushing, M.D.
Ollie McBride, M.D.
William M. Benzing, M.D.
Recording Secretary: Martina Doyle

Reference Committee No. III

Thomas C. Points, M.D., Chairman
E. T. Cook, Jr., M.D.
Roger Reid, M.D.
W. R. Patten, M.D.
Tom Taylor, M.D.
Worth M. Gross, M.D.
Recording Secretary: Dixie Griffith

Reference Committee No. IV

James S. Petty, M.D., Chairman
Myra A. Peters, M.D.
E. E. Shircliff, M.D.
C. E. Lively, M.D.
Francis R. First, M.D.
Elvin Amen, M.D.
Robert H. Hayes, M.D.
Recording Secretary: Madelyn Burton

As the next order of business, the following persons were introduced and brought greetings to the House of Delegates:

Mrs. Tom C. Sparks, President of the Woman's Auxiliary to the Oklahoma State Medical Association;

Mrs. J. F. York, Incoming President of the Woman's Auxiliary;

Mrs. William H. Evans, President-Elect, Woman's Auxiliary to the American Medical Association.

Mark R. Everett, Ph.D., Dean of the University of Oklahoma School of Medicine. (President Joe L. Duer, M.D., presented Doctor Everett with a check from the American Medical Association Education and Research Foundation in the amount of \$14,036.40.)

Edward L. Moore, M.D., AMA Delegate to the British Medical Association Annual Meeting, April 2-5, 1964, Northampton, England. Doctor Moore gave a brief summary of socialized medicine in England.

Doctor Duer then introduced Clinton Gallaher, M.D., Shawnee, who was appointed by the President to fill the vacancy of Vice-Speaker of the House of Delegates.

The Speaker welcomed all members and guests to the 58th annual

assembly and made the following remarks:

"It shall be my pleasure to serve as your Speaker during this session. Humbly I ask for your cooperation and understanding. To follow in the footsteps of our late Speaker, Doctor Marshall O. Hart, is no easy task. Your agenda is the product of Doctor Hart's efforts and it shall be carried to completion to the best of my ability.

"The complexity of modern society involves all phases of human endeavor—medicine is no exception. To philosophize on the vanishing country doctor, the magnitude of welfare and government intervention, or the selection of a new dean for the medical school would take much time. Time is of the essence if all the delegates are to receive the maximum benefit from a two-day meeting. Therefore, I close these remarks with a quotation from the 46th Chapter of Isaiah: 'Tell ye, and bring them near; yea, let them take council together.'

"Thank you."

The following announcements were made by the Speaker:

1. The 59th Annual Meeting of the Oklahoma State Medical Association will be held in Tulsa, May 14th, 15th and 16th, 1965, the Mayo Hotel.

2. The House will complete the opening session by noon, in order to permit delegates to attend the scientific program scheduled for the 14th floor of the Skirvin Hotel.

3. Reference committees will meet at 5:00 p.m., May 1st, in the Skirvin Hotel.

The Speaker then asked the pleasure of the House of Delegates in regard to the reading of the minutes of the last annual meeting.

E. K. Norfleet, M.D., Bristow, moved that the House of Delegates dispense with reading of the minutes and that they be adopted as published.

(Continued on Page 282)



Announcing Move

The Beverly Hills Hospital The Beverly Hills Clinic

(Formerly Beverly Hills Clinic and Sanitarium)

Acute Psychiatric Diagnostic and Treatment Center

☆ New Outpatient and Hospital Facilities ☆ Beautiful New Buildings On a Secluded Scenic and Wooded Site ☆ Open Cottage System and Regulated Intensive Treatment Units ☆ All Established Methods of Diagnosis and Treatment Utilized. ☆

PSYCHIATRY

A. J. Schwenkenberg, M.D.

Joseph L. Knapp, M.D.

Jackson H. Speegle, M.D.

Fred H. Jordan, M.D.

PSYCHIATRY

Joseph H. Lindsay, M.D.

John T. Holbrook, M.D.

PSYCHOLOGY

Traudl E. Jordan-Diener, Ph.D.

W. R. Garretson, M. A.

1353 N. Westmoreland



Dallas 11, Texas



FE 1-8331

Survey To Test Performance of Oklahoma Blue Shield

A special nation-wide "Test of Performance" study of Blue Shield Plans will officially begin this month. The survey is being conducted by all 71 Blue Shield Plans throughout the nation. The Oklahoma Blue Shield Plan and Oklahoma physicians have been asked to participate in this national survey to be conducted in late June and July.

According to Windham Hill, Hospital and Professional Relations Manager of Oklahoma Blue Cross-Blue Shield, the primary purpose of the survey is to measure how well the Blue Shield Plans perform in meeting the cost of covered physician services. The information obtained will furnish the Blue Shield Plans with detailed results, Mr. Hill reported, so that it can evaluate not only the overall level of its performance, but also the difference in contracts and fee schedules, including their component categories (surgical, medicine, maternity, anesthesia, etc.). It will also provide factual data for a number of large accounts for purchasing adequate coverage for their employees.

Since the survey will be on a national basis, the local Plans will be able to make comparisons of performance in other states. Random selection of claim numbers by type of contract will be made on this basis.

Oklahoma physicians will receive a stream-lined questionnaire for selected claims in their bi-monthly payment check. It is estimated that not more than one minute per claim will be required to complete the questionnaire. Some doctors will receive more than one questionnaire during the four-week study. Pre-addressed postage-paid envelopes will be furnished to forward the completed questionnaire to the National Association of Blue Shield Plans in Chicago for compilation of results.

Pre-tests have been conducted earlier this year by the Massachus-

W. E. JONES, SR., M.D.
1887-1964

W. E. Jones, Sr., M.D., a Seminole surgeon since 1927 and father of W. E. Jones, Jr., M.D., of Bristow, died in Bristow, May 7th, 1964.

The 87-year-old doctor was a member of a family of physicians—his father, grandfather and great-grandfather all practiced medicine. In addition, two members of his own family are now practicing physicians.

Born in Morrilton, Arkansas in 1887, Doctor Jones was a graduate of the University of Louisville School of Medicine. After taking his residency in the Panama Canal Zone, he practiced in Brazil as well as several other foreign countries.

DEATHS

Before coming to Seminole, he had practiced medicine in Morrilton for seven years.

PRESSE M. PAUL, JR., M.D.
1925-1964

A native of Wilburton, Oklahoma, Presse M. Paul, Jr., M.D., died in Oklahoma City, May 25, 1964.

A graduate of the University of Oklahoma School of Medicine in 1949, Doctor Paul took a residency in internal medicine at Saint Anthony Hospital before establishing his practice in Seminole, Oklahoma. Since 1951 he had practiced in Oklahoma City.

He had memberships in the Association of American Physicians and the Phi Beta Pi. □

Experts To Review Computers' Role in Medicine at AMA Convention

The computer's potential role in detecting, amplifying, measuring, analyzing, correlating, communicating, controlling, and forecasting the manifestations of the human organism will be explored during a half-day scientific program at the American Medical Association's 113th Annual

Convention in San Francisco, June 21st-25th.

"Computers In Medicine" will be the subject title, and the presentation will be made on the last day of the meeting—Thursday, June 25.

Doctor Lemuel C. McGee, of Wilmington, Delaware, Secretary of the AMA Section on Preventive Medicine, announced that seven of the country's top computer experts will serve on a panel to discuss the instrument's role in the field of medicine.

"The computer was selected as a subject," Doctor McGee said, "because every medical researcher, every physician, every clinic and every hospital has been struggling for some time with mountains of data requiring classification, analysis and storage. A half-day study course by a panel of experts may point the way of shifting this burden to modern electronic data processing equipment with tremendous economies in time and gains in precision."

The following will make up the panel:

ets and Alabama Blue Shield Plans. Blue Shield reports enthusiastic response to the study as indicated by the fact that 85 per cent of the questionnaires distributed to physicians in these Plans were completed and returned.

"Oklahoma physicians can help improve the accuracy of the national survey by promptly completing each questionnaire," Mr. Hill said. "The identity of the physician or the patient will not be revealed by the study."

It is believed the data gained by this survey will be valuable information for Oklahoma physicians. Physicians are urged to cooperate in every way possible in the survey. □

Roderick E. Jensen, Ph.D., International Business Machines Corporation, New Orleans.

Doctor Mark S. Blumberg, Stanford Research Institute, Menlo Park, California.

Doctor Robert F. Rushmer, Department of Physiology, University of Washington School of Medicine, Seattle.

Doctor William A. Spencer, Baylor University School of Medicine, Houston, Texas.

Doctor Charles E. Kossman, New York City.

Doctor Howard P. Rome, Mayo Clinic, Rochester, Minnesota.

Doctor A. H. Schwichtenberg, Head of the Department of Aerospace Medicine and Bioastronautics, The Lovelace Foundation, Albuquerque, New Mexico.

Doctor Blumberg will discuss the present status and future prospects of computers in short-term community hospitals. Emphasis will be placed on systems for processing physicians orders. Topics will include the securing of machine readable orders from physicians, reviewing the accuracy and logic of orders, identifying patients, automatically reminding hospital personnel of obligations, and machine control of hospital supplies, particularly individual drug doses.

Doctor Schwichtenberg will discuss the nature and characteristics of computers in medicine.

"Special efforts at increasing training and understanding in their use is essential, especially for younger physicians," Doctor Schwichtenberg said in discussing his part on the AMA program. "Undreamed of application will become manifest both in research and practice. Diagnoses will be more precise and patient care markedly improved on the basis of objective analyses both of diagnostic criteria and results of treatment."

THE FAMILY AND HUMAN ADAPTATION, by Theodore Lidz. New York, International Universities Press, Inc., 1963. pp. 120. \$3.00.

This book contains three lectures in social psychiatry given by Doctor Lidz in 1961. These present concepts of personality developments are based upon studies of families containing schizophrenic children. These concepts deal with problems of adaptation and integration. Just as "pathology is often the highroad to the understanding of physiology" so this type of study enhances understanding of the family as the basic unit in society and its role in modifying human behavior.

The first lecture, "The Family and Human Adaptation in the Scientific Era," provides historical perspective for examination of our current isolated nuclear family. Doctor Lidz feels that despite its instability

it is better able to provide children with adaptability for living in this scientific age than extended kinship system. In "Family Organization Personality Structure" he designates characteristics of the family which appear essential to assuring adaptability and ego integrity in offspring. These are ability of the parents to 1) form a coalition, 2) to maintain boundaries between generations and 3) to adhere to appropriate sex-linked roles. In "The Family Language and Ego Functions" he emphasizes the vital role of the family in transmitting language and meanings and thereby one of the basic adaption techniques of the culture.

The book is readily understood by a non-psychiatric reader; it provides a viewpoint of interest and value on a subject of concern to every physician and the family.—*M. F. Schottstaedt, M.D.* □

Computers are playing an ever-expanding biomedical role. They are being used to:

—Recommend the most appropriate drugs for psychiatric patients.

—Stimulate and analyze chemical responses of blood to various factors in surgery more rapidly, precisely, and economically than conventional laboratory means.

—Aid in the analysis of huge masses of data assembled in heart studies.

—Develop an ultimate hospital-wide system of automated record handling, storage and retrieval.

—Help provide significant new knowledge on the organization of brain systems during sleep, fatigue, weightlessness, vibration, prolonged darkness and other conditions astronauts may encounter in space flight.

—Correlate and analyze information obtained from case histories of

patients with chronic disease and injury so as to know how best to formulate a concept of rehabilitation for completion of total and adequate medical care. □

MEDICINE'S VOICE . . .

(Continued from Page 243)

editorially? And what better medium is there for the journalistic pursuit of important objectives commonly shared by the profession and the drug industry?

By their recent advertising policies, drug manufacturers are contributing to the central control of medical communications—the nationalization of the medical press.

Talk with your detailman about this problem. If his company is not supporting your *Journal*, raise an objection on behalf of the voice of Oklahoma Medicine. □

Miscellaneous Advertisements

FOR RENT: Three-room air-conditioned suite in clinic with two general practitioners and a prescription shop. Mrs. L. C. Northrup, 1828 East 32nd Place, Tulsa, Oklahoma.

PHYSICIAN needed for Locum Tenens, Tulsa, August 8th-23rd. Pediatrician or general practitioner will fill the bill. Write Key H, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

WANTED: G.P. to take over well-established practice in southern Oklahoma town, 25,000 population. Large drawing area. Equipment for lease-purchase or will make other arrangements. Offices consist of reception room, X-Ray, two examining rooms, two bedrooms, laboratory and office. Contact Key J, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

DOCTOR'S WIDOW must sell home. Three bedrooms, living room, dining room, clubroom, two baths and large utility room. Accessible to all schools. Corner lot, northwest area, Oklahoma City. Contact Key F. The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

BOARD QUALIFIED surgeon, who would also like to do general practice, needed to join established group of general practitioners in an expanding city of 25,000; new 70 bed general hospital with complete surgical facilities will be completed by July, 1964. This group takes advantage of group practice, but each physician is independent, as far as his office and financial affairs are concerned. Further details furnished on request, please sent complete resume with your request. Write Key D, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

GENERAL practice established ten years; grosses over \$70,000.00 per year. Building leased, complete office, laboratory and x-ray equipment. Liberal terms. Leaving to specialize, will stay to introduce until December. Contact Key T, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

WANTED: Young man desiring general practice in a group of eight men, four of whom are board certified. Starting salary \$1,300 plus percentage per month. Growing agricultural town in Texas Panhandle. Contact C. E. Rush, 309 Lawton, Hereford, Texas.

GENERAL PRACTITIONER NEEDED. Share office space in new clinic, Sulphur, Oklahoma. No partnership necessary. Good income assured from start, no objection to surgical practice. New county-owned Arbuckle Memorial Hospital will be enlarged to 60 beds by July 1st. City has 5-6,000 population and needs additional doctors. Home of national park attracting one million visitors annually. Contact R. W. Lewis, M.D., 1901 W. Broadway, Sulphur. Telephone 135.

LOCUM TENENS needed for two or three months, beginning June 15th. Would like to accept a call for mission service during this period and need a G.P. to look after my practice. Offer includes comfortable home and office, both rent-free, plus all net proceeds from the practice. Contact A. C. Hirshfield, 908 N.E. 50th, Oklahoma City 5, Oklahoma.

OPENING IN general practice group, interest in surgery especially desirable. East central Oklahoma community of 10,000 with drawing area of 20,000. Contact Key C, The Journal of the Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

GP—OKLAHOMA town of 5,600. Near Tulsa. Joint Commission accredited 40-bed hospital. Adequate remuneration. Well-trained office staff including ASCP technologist. Equipment and office available—your terms. Other office space available. Specializing. Available now or July 1. Contact Key N, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

FOR SALE: X-Ray Patrician 200 MA with all accessories except motor drive. Attractive, well cared for, and efficient machine, two years old. Discount of 50 per cent off 1961 price. \$1,000 down, will finance balance, including installation, if desired. Contact Key A, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

RADIOLOGIST needed for private hospital group, in an expanding city of 25,000; new 70 bed general hospital will be ready for occupancy July, 1964; guaranteed salary, if desired, plus commission or other arrangements can be worked out; a very good opportunity for the right person. The individual will have the opportunity to do private office practice in his field of radiology, including therapy if he desires. Write Key E, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

SUBLEASE medical office one year, 735 square feet, desirable location in Tulsa, modest rent, available approximately June 15. Contact Key B, The Journal of the Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

SOUTH OKLAHOMA City's first Medical Center needs pediatrician, internist, dermatologist and urologist for independent practice with presently established nucleus of six other specialists and close affiliation with family clinic of three G.P.'s doing volume practice. New specialties building in center will be only three minutes from new hospital now under construction. Call SWift 4-2246 after 9:00 p.m.

IDEAL opening for young doctor in well established medical clinic, sharing reception room and equipment with three other doctors. Wonderful location on North May Avenue, Oklahoma City. Contact Frank D. Thompson, 3115 N. Pennsylvania, Oklahoma City, JA 5-5700 or JA 4-9552.

(Continued from Page 277)

lished in the OSMA Journal. Doctor Wilkie D. Hoover, Tulsa, seconded the motion and it carried.

The House recessed for ten minutes to allow Trustee Districts 3, 6, 9 and 12 to caucus.

The next order of business on the agenda was the nomination of officers. The Speaker declared the House of Delegates open for nominations for the office of President-Elect (one-year term of office).

Rex E. Kenyon, M.D., Oklahoma City was nominated by Vernon D. Cushing, M.D., Oklahoma City.

Roger Reid, M.D., Ardmore, moved to cease nominations. The motion was seconded and carried.

Nominations were then open for the office of Vice-President (one-year term of office).

R. R. Hannas, M.D., Sentinel, was nominated by E. K. Norfleet, M.D., Bristow.

E. K. Norfleet, M.D., was nominated by Walter E. Brown, M.D., Tulsa.

R. Q. Goodwin, M.D., Oklahoma City, moved to cease nominations. Dick H. Huff, M.D., Oklahoma City, seconded the motion and it carried.

Nominations were open for the office of Secretary-Treasurer (two-year term of office).

Mark R. Johnson, M.D., Oklahoma City, was nominated by Lloyd A. Owens, M.D., Oklahoma City.

Bob J. Rutledge, M.D., Oklahoma City, was nominated by William A. Matthey, M.D., Lawton.

Thomas W. Taylor, M.D., Tulsa, moved to cease nominations. The motion was seconded by Wilkie D. Hoover, M.D., Tulsa, and carried.

With Clinton Gallaher, M.D., Vice-Speaker, presiding, nominations were open for Speaker of the House of Delegates (two-year term of office).

C. M. Hodgson, M.D., Kingfisher, was nominated by Ray V. McIntyre, M.D., Kingfisher.

Walter E. Brown, M.D., Tulsa, moved to cease nominations. Doctor R. Q. Goodwin, Oklahoma City, seconded the motion and it carried.

C. M. Hodgson, M.D., resumed the chair and announced that nominations for the office of Vice-Speaker of the House of Delegates were open (two-year term of office).

Worth M. Gross, M.D., Tulsa, was nominated by Francis A. Davis, M.D., Shawnee.

Roger Reid, M.D., Ardmore, moved to close nominations. Doctor Hoover, Tulsa, seconded the motion and it carried.

Nominations were open for Delegate to the American Medical Association (two-year term of office).

Wilkie D. Hoover, M.D., Tulsa, was nominated by William M. Benzing, M.D., Tulsa.

Francis A. Davis, M.D., Shawnee, moved to cease nominations. The motion was seconded and carried.

Nominations were open for Alternate Delegate to the American Medical Association (two-year term of office).

Francis A. Davis, M.D., Shawnee, was nominated by Clinton Gallaher, M.D., Shawnee.

Doctor Thomas C. Points, Oklahoma City, moved to cease nominations. R. Q. Goodwin, M.D., Oklahoma City, seconded the motion and it carried.

Nominations were declared open for Trustees from Districts 3, 6, 9 and 12 (three-year term of office).

District 3:

Avery B. Wight, M.D., Enid, and Albert W. Brownlee, M.D., Guthrie, were nominated by Paul H. Rempel, M.D., Enid.

District No. 6:

Vernon D. Cushing, M.D., Oklahoma City, and Lewis C. Taylor, M.D., Oklahoma City, were nominated by Thomas C. Points, M.D., Oklahoma City.

District No. 9:

Francis R. First, Jr., M.D., Checotah, and Burdge F. Green, M.D., Stilwell, were nominated by Edwin Pointer, M.D., Sallisaw.

District No. 12:

E. M. Gullatt, M.D., Ada, and John A. Graham, M.D., Pauls Valley, were nominated by David C. Ramsay, M.D., Ada.

Roger Reid, M.D., Ardmore, moved to cease nominations. Ray V. McIntyre, M.D., Kingfisher, seconded the motion and it carried.

As the next order of business, reports were heard from the AMA Delegates.

Doctor Wilkie D. Hoover informed the House that the following were among the major actions taken at the American Medical Association's 112th Annual Meeting held in Atlantic City, June 16th-20th, 1963:

1. The Board of Trustees was increased in size from 11 members to 15 members, by adding three elected trustees and including the immediate past-president for a one-year term.

2. Regarding the AMA Sections and Scientific Program, it was the AMA House of Delegates' decision that all section officers be elected by members of the section and that no officers be appointed by the AMA Board of Trustees.

In connection with section registration, the House decided that a member of a section who desires to change his registration from one section to another because of a change in his specialty, is required to inform AMA Headquarters by written notice at least sixty days in advance of the Annual Meeting.

3. Referring to interns and residents, the AMA went on record as opposing any program by which any part of an intern's or resident's salary is paid out of fees collected by the attending physician or out of fees collected under any type of medical-surgical insurance coverage, and recommended that any future proposals on the compensation of house officers be thoroughly studied by the Law Department and Judicial Council before submission to the House of Delegates.

4. The House approved establishment of an AMA physicians' pension plan, which will be open to all AMA members and their employees who can qualify under the Act, Public Law 87-792 (Keogh Law).

5. The House agreed with the Board of Trustees' report that the

AMA should defer any definitive statement regarding the relationship of tobacco and disease, since extensive research is still necessary for the complete answers on the cause and effect of many toxins, including tobacco.

Doctor Malcom E. Phelps gave a brief summary on actions taken by the House of Delegates of the American Medical Association at its Seventeenth Clinical Meeting held in Portland, Oregon, December 1st-4th, 1963. He pointed out that the House approved a Board of Trustees proposal that the American Medical Association Education and Research Foundation undertake a comprehensive program of research on tobacco and health; in approving a Board report on professional relationships with voluntary health agencies, the House declared that the AMA maintain its policy of neither approving nor disapproving national voluntary health agencies; adopted a policy statement to the effect that it is highly essential that the organization of new blood banking programs and the modification of existing ones should have, in the interest of public health and safety, the approval of the county or district medical society and should be coordinated with existing approved blood banking facilities.

Next on the agenda was the *Report of the President*.

Doctor Duer read his report and it was referred to Reference Committee No. 1. (For report, see closing session.)

The next item on the agenda was the *Board of Trustees Report*, which was read by R. R. Hannas, M.D., Vice-President, and referred to Reference Committee No. 1. (For report, see closing session.)

Due to the fact that Doctor Hannas was serving as Annual Meeting Program Chairman, and desired to be excused from the House of Delegates in order to take care of his duties in connection with the scientific program, he requested permission to read the *Council on Professional Education Report* and asked

that the House take action on the report in this session of the meeting. Permission was granted and he read his report.

Doctor Hannas moved the approval of the *Council on Professional Education Report*, Doctor Hoover seconded the motion and it carried. (For report, see closing session.)

Mark R. Johnson, M.D., Secretary-Treasurer, read the *Treasurer's Report* and it was referred to Reference Committee No. 1. (For report, see closing session.)

The Speaker informed the House that the following Council and Committee Reports were received and referred to their designated reference committees:

1. *Council on Public Health*, Hayden H. Donahue, M.D., Chairman, referred to Reference Committee No. IV.

2. *Council on Socio-Economic Activities*, E. M. Gullatt, M.D., Chairman, referred to Reference Committee No. III.

3. *Council on Professional Education*, R. R. Hannas, M.D., Chairman, (Report approved by special request earlier in the meeting.)

- A. *Financial Aid to Education Committee*, J. Hoyle Carlock, M.D., Chairman, referred to Reference Committee No. 1.

4. *Council on Public Policy*, Rex E. Kenyon, M.D., Chairman, referred to Reference Committee No. II.

- A. *Grievance Committee*, E. C. Mohler, M.D., Chairman, referred to Reference Committee No. II.

5. *Council on Insurance*, Dave B. Lhevine, M.D., Chairman, referred to Reference Committee No. IV.

The Speaker then announced that Resolutions Nos. 1 through 27 had been published in the April issue of the *OSMA Journal*; that Resolutions Nos. 28, 29 and 30 were similar in intent or duplications of Resolutions Nos. 12, 5 and 6, respectively, and would therefore not be read in the opening session; and Resolutions Nos. 31 and 32, submitted by the Board of Trustees would be read by "Title" and "Resolve" only (For Resolutions

Nos. 1 through 32, see closing session.)

Doctor Joe L. Duer moved to read Resolution No. 31 (A Memorial to Doctor Marshall O. Hart) in its entirety and recommended its adoption. Doctor Wilkie D. Hoover seconded the motion and it carried.

The resolution was read by the Speaker.

Doctor Hodgson announced the last order of business would be the reading of the *Necrology Report*. The House of Delegates stood during the reading of the report:

Lin Alexander, M.D., Okmulgee

H. A. Angus, M.D., Lawton

Ray M. Balyeat, M.D., Oklahoma City

James G. Binkley, M.D., Oklahoma City

James F. Curry, M.D., Sapulpa

Duke G. Divine, M.D., Wagoner

Gladys K. Dolan, M.D., Tulsa

Ernest B. Dunlap, M.D., Lawton

Herman Fagin, M.D., Oklahoma City

Frank L. Flack, M.D., Tulsa

Clifton P. Gillespie, M.D., Norman

Harry R. Haas, M.D., Disney

Samuel Goodman, M.D., Tulsa

Harold W. Hackler, M.D., Norman

Marshall O. Hart, M.D., Tulsa

Paul K. Heerwagen, Jr., M.D., Collinsville

Howard L. Hennessey, M.D., Oklahoma City

Walter A. Huber, M.D., Rochester, Minnesota

Robert C. Kayler, M.D., McLoud

E. S. Kilpatrick, M.D., Elk City

Ralph B. Kinsinger, M.D., Blackwell

Dean W. LeMaster, M.D., Wayne

Floyd S. Newman, M.D., Shattuck

Johnnie A. Orbin, M.D., Oklahoma City

Fred L. Patterson, Sr., M.D., Duncan

Daniel L. Perry, M.D., Tulsa

Lorenzo J. Pico, M.D., Shawnee

Ernest W. Reynolds, Sr., M.D., Tulsa

Robert O. Ryan, M.D., Norman

Milton H. Sebring, M.D., Oklahoma City

Richard D. Shelby, M.D., Chickasha

Frank A. Stuart, M.D., Tulsa
 Robert L. Taylor, M.D., Oklahoma City
 Milton K. Thompson, M.D., Muskogee
 Charles D. Tool, M.D., Edmond
 Charles F. Walker, M.D., Grove
 Orange E. Welborn, M.D., Ada
 Nelson S. White, M.D., Tulsa
 Elbert V. Winningham, M.D., Ardmore
 William M. Yeargan, M.D., Hollis

Doctor Hodgson announced that the reference committees would meet at 5:00 p.m. in the following meeting rooms and urged the Delegates to attend:

Reference Committee No. I, Executive Suite, 2nd Floor, Skirvin Hotel.

Reference Committee No. II, Venetian Room, 14th floor, Skirvin Hotel.

Reference Committee No. III, Crystal Room, 2nd floor, Skirvin Hotel.

Reference Committee No. IV, Registry Room, 2nd floor, Skirvin Hotel.

The Speaker also asked the physicians to visit the technical exhibits.

The meeting recessed at 11:30 a.m.

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CLOSING SESSION

The Closing Session of the 58th Annual Meeting of the House of Delegates of the Oklahoma State Medical Association was called to order by the Speaker, C. M. Hodgson, M.D., Kingfisher, at 9:15 a.m. in the Persian Room of the Skirvin Tower Hotel, Oklahoma City, Oklahoma.

The Credentials Committee Chairman reported a quorum present.

The Speaker introduced Milford O. Rouse, M.D., Dallas, Texas, Speaker of the AMA House of Delegates and Chairman of the AMA's Medicine and Religion Committee. Doctor Rouse brought greetings and invited the Delegates to attend the Peter E. Russo Memorial Service to be held Sunday, May 3rd, 1964.

The first item of business on the agenda was the reference committee reports.

REFERENCE COMMITTEE No. I

Presented by Edward K. Norfleet, M.D., Chairman.

Mr. Speaker and Members of the House of Delegates:

Your reference committee gave careful consideration to the items referred to it and makes the following report:

Item 1. President's Report: The committee takes cognizance of the precedent set by this report and commends President Duer for this laudable effort.

The President's Report contained the following recommendations:

1. That annual visitation to all Trustee Districts be made a part of the duties of OSMA officials.

2. That a Legislative Tour to Washington be made an annual affair, regardless of the current status of issues.

3. That an Ad Hoc Committee study the possible enlargement of the OSMA headquarters building, to perhaps include quarters for other related organizations.

4. That an indoctrination program for new OSMA members be studied and recommendations made.

5. That a physician be employed as Executive Vice-President of the association; his salary to be financed by a dues increase.

6. That a long-range policy committee be created.

Of the aforementioned recommendations, your committee comments as follows:

1. Annual visitations to Trustee Districts should be recommended to the officers of the association, but latitude should be granted for these officials to exercise individual judgment.

2. The Legislative Tour to Washington should be continued as outlined in the President's Report.

3. An Ad Hoc Committee should study the building enlargement proposal and report to the Board of Trustees.

4. An indoctrination program for new members is already under consideration by the Council on Public Policy. The study should be con-

tinued and a report made to the Board of Trustees.

5. Regarding the hiring of a physician, your committee believes this recommendation should be disapproved. It is agreed that the state headquarters is presently understaffed, but a more workable solution would be to hire additional employees with specialized talents. Since the Board of Trustees is charged with the responsibility of staffing the association, the problem should be referred to the Board for study and possible action. In addition, it would necessitate an approximate \$20.00 dues increase, which does not appear feasible at this time.

6. Your committee supports the recommendation to form a long-range planning committee, and recommends that this project be referred to the Constitution and Bylaws Committee.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For report, see page 288.)

Item 2. Trustees Report. The reference committee recommends approval of the Board of Trustees Report and, in addition, makes the following comments and recommendations:

1. It is noted that the association presently has 1,916 members who should normally be included in the determination of the OSMA representation in the AMA House of Delegates (1,770 active; 31 applications pending; and 115 Honorary-Life). However, the AMA requires that all members used in determining representation must have full privileges. Since OSMA Honorary-Life members have all rights and privileges except the right to hold office, the association is prevented from counting 115 of its members according to AMA regulations.

It is therefore recommended, that the Constitution and Bylaws Committee of the Oklahoma State Medical Association draft the necessary amendment to the OSMA Bylaws to grant full rights and privileges to Honorary-Life Members.

By doing so, the association will only be about 85 members short of gaining a third member of the AMA House of Delegates.

2. Your committee wishes to add emphasis to the division of the House of Delegates' annual meeting into a two-day event. It is obvious that the volume of business to transact at annual sessions demands more careful attention and deliberation than can be obtained during a one-day session. The change in meeting format is commended, and your reference committee urges that it be continued in future years.

3. There is some question that the annual banquet provided by the OSMA for the Student American Medical Association represents the wisest expenditure of funds. Witnesses appearing before your committee suggested that more benefit might accrue to the students and to the OSMA if a one-day educational course and luncheon would be conducted by the association in lieu of the banquet. Further, other witnesses believed the association should offer financial support to assist the University of Oklahoma Chapter of the Student AMA in sending a larger Oklahoma delegation to national meetings of the student group.

Your committee did not formulate any definite recommendations as to how the expenditure should be redirected, but did agree with the witness that the entire project should be studied carefully with the view in mind of offering more beneficial support to the fine student group at our medical school.

Therefore, it is recommended that the Council on Public Policy undertake a reappraisal of the Student AMA Banquet in the light of the aforementioned suggestions, and that the views of the students be solicited and considered. Recommendations of the Council should be made to the Board of Trustees.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For report, see page 288.)

Item 3. Treasurer's Report: Your committee wishes to recognize with

appreciation the improvements which have been made in the accounting practices of the association. However, further improvements are recommended as follows:

1. Chapter IV, Section 8.00 and 8.01 establish an audit committee to be appointed by the Board of Trustees. To our knowledge, this portion of the Bylaws has not been followed for many years, and it is recommended that the audit committee system be reactivated.

2. The "Fixed Expense" portion of the financial statement should be provided in detail, rather than a lump sum.

3. It is recognized that an estimated financial statement is the only practical way to present the financial picture of the association to the House of Delegates during the annual session. However, after the books are audited on May 31st of each year, the Audit Committee should report in detail to the Board of Trustees, and the Board should take official action on the exact financial statement of the association.

Mr. Speaker, I recommend the adoption of this portion of the report. The motion was seconded and carried. (For report, see page 291.)

Item 4. Financial Aid to Education Committee Report: This report is approved by the Reference committee.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For report, see page 298.)

Item 5. Resolution No. 1: Your reference committee recommends approval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 313.)

Item 6. Resolution No. 3: Your reference committee recommends approval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 314.)

Item 7. Resolution No. 4: Your reference committee recommends approval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 314.)

Item 8. Resolution No. 10: Your reference committee recommends approval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 316.)

Item 9. Resolution No. 17: Your reference committee recommends approval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 318.)

Item 10. Resolution No. 19: Your reference committee recommends approval of this resolution, but suggests that the words "of the Bylaws" be inserted after "Section 3.00" in the first line of the last paragraph.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 319.)

Item 11. Resolution No. 22: Your reference committee recommends approval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 319.)

Mr. Speaker, I move the adoption of the report as a whole. Doctor Hoover seconded the motion and it carried.

REFERENCE COMMITTEE No. II
Presented by Francis A. Davis, M.D., Chairman.

Mr. Speaker and Members of the House of Delegates:

Your reference committee gave careful consideration to the items referred to it and makes the following report:

Item 1. Grievance Committee Report: Your committee recommends the approval of this report in its entirety.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For report, see page 312.)

Item 2. Resolution No. 5, introduced by Tulsa County Medical So-

ciety and Resolution No. 29, introduced by East Central Oklahoma County Medical Society. Since these two resolutions are identical, your committee recommends the approval of Resolution No. 5.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 314.)

Item 3. Resolution No. 6, introduced by Tulsa County Medical Society, and Resolution No. 30, introduced by East Central Oklahoma County Medical Society: Since these two resolutions are identical, your committee recommends the approval of Resolution No. 6, after amending the last "Resolve" to read:

"BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association, through appropriate council or committee, urges the Oklahoma State Department of Public Health to provide immunizations to the qualified needy only."

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 315.)

Item 4. Resolution No. 8: The committee recommends disapproval of this resolution because the persons who appeared before the committee, in general, were orthopedic surgeons and the committee feels that the problem of crippled children involves all phases of medicine and should have further study.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 314.)

Item 5. Resolution No. 9: The committee studied this resolution extensively and feels that it should approve the resolution. However, the committee also feels that the Oklahoma State Medical Association should review the whole principle of indigent care, since it is the opinion of the committee that you cannot have a mixed economy (part socialized and part free enterprise care).

If this continues, it will result in socialized medicine.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 314.)

Item 6. Resolution No. 13: Your committee recommends the approval of this resolution as submitted to the House.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 317.)

Item 7. Resolution No. 14: Your committee recommends disapproval of this resolution. We wish to state that the committee, in general, approves the principle outlined in Resolution No. 14, but feels that the Oklahoma State Medical Association is not the proper organization to institute this action.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 317.)

Item 8. Resolution No. 15, introduced by Pottawatomie County Medical Society and Resolution No. 16, introduced by Canadian County Medical Society: Due to the similarity of intent and purpose, the committee recommends the adoption of Resolution No. 16 in lieu of Resolution No. 15.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 317.)

Item 9 Resolution No. 32: Your committee recommends the approval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 322.)

Item 10. Report of the Council on Public Policy: Your committee recommends the approval of this report in its entirety.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For report, see page 304.)

Mr. Speaker, I move the adoption of the report as a whole. The motion

was seconded by Galen P. Robbins, M.D., and carried.

Mr. Speaker, I wish to take this opportunity to thank the members of the committee who worked so diligently on all these resolutions and reports.

REFERENCE COMMITTEE No. III

Presented by Thomas C. Points, M.D., Chairman.

Mr. Speaker and Members of the House of Delegates:

Your reference committee gave careful consideration to the items referred to it and makes the following report. We would recommend that in the future those persons or societies who present resolutions be in attendance to give the reference committee their reasons and thoughts on same.

Item 1. Resolution No. 20: (Regarding Clarification of Policies, Joint Commission on Accreditation of Hospitals): Your committee recommends disapproval of this resolution on the grounds that this information is easily available in each hospital where the physician practices and is at his disposal for study of any regulation.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 319.)

Item 2. Resolution No. 21 (Regarding Socio-Economic Education, O.U. Medical School): Your committee recommends the approval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 319.)

Item 3. Resolution No. 23 (Regarding Disability Evaluation for Compensation Purposes): The committee recommends approval of this resolution, and further recommends that it be referred to the Occupational Health Committee of the Oklahoma State Medical Association for study and implementation.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 319.)

Item 4. Resolution No. 24 (Regarding Service Contracts): The committee recommends disapproval of this resolution and reaffirms the previous House of Delegates' action on service contracts.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 320.)

Item 5. Resolutions No. 12 and No. 28: These resolutions were considered together as they were almost identical, and your committee recommends approval of Resolution No. 12.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 316.)

Item 6. Resolution No. 2 (Introduced by the Canadian County Medical Society Regarding Statement of Principle, Indigent Medical Care Program): Your committee recommends that the first resolve of this resolution be disapproved on the grounds that it is impractical, unworkable and unenforceable on a statewide basis. The committee reaffirms the action of previous House of Delegates as to the right of an individual physician to either accept or decline the payment of these fees. The second resolve of this resolution, the committee reaffirms, as it is a long standing statement of policy of the Oklahoma State Medical Association.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 314.)

Item 7. Council on Socio-Economic Activities:

A. Section I. Public Welfare Committee. Your committee recommends the approval of the recommendations of the Public Welfare Committee down to and including the word "premium" under Recommendation No. 6, deleting the remainder of this recommendation as well as Recommendation No. 7.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried.

B. Section II. Crippled Children's Study Committee. Your committee

recommends approval of the recommendations of the Crippled Children's Study Committee, after deletion of the "Note."

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried.

C. Section III. Occupational Health Committee. Your committee strongly recommends approval of this recommendation for reactivation of this committee.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried.

D. Section IV. Prepaid Medical Care Committee. Your committee recommends that this committee be reactivated at its full strength.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried.

E. Section V. Areawide Hospital Planning. As to the recommendation on areawide hospital planning, your committee goes on record as approving a VOLUNTARY group for studying and accumulating statistics on health facilities in the state, providing that the Oklahoma State Medical Association has equal representation with all other representing groups and that these representatives of the OSMA be appointed by the President of the association.

Mr. Speaker, I move the adoption of this portion of the report.

Doctor Harlan Thomas asked for the floor and made the following motion:

I move that the committee's report be amended by deleting the words "all other representing groups" after the word "with" and in place thereof insert the words "the Oklahoma Hospital Association and the Oklahoma Osteopathic Association, and providing that the three other members-at-large are to be chosen by the three aforementioned groups and agreed to by these groups." Doctor Wilkie D. Hoover seconded the motion and it carried.

Mr. Speaker, I move the adoption of this portion of the report as amended. The motion was seconded and carried. (For report, see page 307.)

Mr. Speaker, I move the adoption of this report as a whole. The motion was seconded and carried.

Mr. Speaker, the committee wishes to thank Mr. N. D. Helland of Blue Cross-Blue Shield, Mr. Cleve Rodgers of the Oklahoma Hospital Association, and Mr. Paul Snelson of the Oklahoma State Health Department, who were present at the request of the chairman and presented valuable information as to the various items considered.

Also, the committee is most appreciative of the members of the OSMA who appeared before our committee and is greatly indebted to our secretary, Mrs. Dixie Griffith.

REFERENCE COMMITTEE No. IV.

Presented by James S. Petty, M.D., Chairman.

Mr. Speaker and Members of the House of Delegates:

Your reference committee gave careful consideration to the items referred to it and makes the following report:

Item 1. Report of the Council on Insurance: Your committee recommends the approval of this report.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For report, see page 296.)

Item 2. Report of the Council on Public Health: Your committee recommends the approval of the Council on Public Health's report after the following deletions and additions:

Section I, Paragraph B. Change the recommendation to read: "The Council urges continued participation in the two-year study which began January 1, 1964, and that an adequate release for confidential information be secured on each case."

Section VI, Medical Participation and Control. Add a sixth paragraph to this section which reads:

"6. The State Director of Mental Health be an M.D. with training and experience in psychiatry."

Section VI, Narcotic Addiction. Delete paragraph No. 2, and insert the following:

"2. Hospital treatment for the withdrawal and rehabilitation of these patients should be established.

"3. The law should allow addicts the appropriate parole opportunities."

Section VI. Personnel. Delete the second paragraph in No. 1, and substitute the following:

"Accommodation should be made in the State Mental Health budget to provide for mental health training programs."

Section VI. Research. Delete the third sentence and substitute the following sentence:

"Accommodation should be made in the State Mental Health budget to provide for mental health research programs."

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For report, see page 299.)

Item 3. Resolution No. 7. The committee recommends the approval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 315.)

Item 4. Resolution No. 11. Your committee recommends the approval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 316.)

Item 5. Resolution No. 18. Your committee recommends the disapproval of Resolution No. 18, since this information is a matter of public record and can be obtained by any interested party.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 319.)

Item 6. Resolution No. 25. Your committee recommends the approval of this resolution.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 320.)

Item 7. Resolution No. 26. Because of religious problems involved, the committee recommends that this resolution be presented to the House

of Delegates as a whole without recommendation.

Doctor Malcom E. Phelps moved that the House of Delegates take no action on this resolution. Doctor Hoover seconded the motion and it carried. (For resolution, see page 321.)

Item 8. Resolution No. 27. Your committee recommends that this resolution be disapproved because further study by the American Medical Association is in progress.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and carried. (For resolution, see page 321.)

Mr. Speaker, I move the adoption of the report as a whole. Doctor G. B. Gathers seconded the motion and it carried.

Mr. Speaker, I wish to take this opportunity to thank the members of the committee who worked so diligently on all these resolutions and reports.

Doctor Hodgson announced the next order of business would be the election of officers. He stated that there would be no further nominations. A ballot with the names of all nominees was distributed to the Delegates, and the following officers were elected, as certified by the Tellers Committee:

Rex E. Kenyon, M.D., Oklahoma City, was voted President by acclamation.

R. R. Hannas, M.D., Sentinel, was voted Vice-President.

Bob J. Rutledge, M.D., Oklahoma City was voted Secretary-Treasurer.

C. M. Hodgson, M.D., Kingfisher, was voted Speaker of the House by acclamation.

Worth M. Gross, M.D., Tulsa, was voted Vice-Speaker of the House by acclamation.

Wilkie D. Hoover, M.D., Tulsa, was voted Delegate to the AMA by acclamation.

Francis A. Davis, M.D., Shawnee, was voted Alternate-Delegate to the AMA by acclamation.

Avery B. Wight, M.D., Enid, and *Albert W. Brownlee, M.D.,* Guthrie, were voted Trustees for District No. 3, by acclamation.

Vernon D. Cushing, M.D., Oklahoma City, and *Lewis C. Taylor, M.D.,* Oklahoma City, were voted Trustees for District No. 6, by acclamation.

Francis R. First, Jr., M.D., Checotah, and *Burdge F. Green, M.D.,* Stilwell, were voted Trustees for District No. 9, by acclamation.

E. M. Gullatt, M.D., Ada, and *John A. Graham, M.D.,* Pauls Valley, were voted Trustees for District No. 12, by acclamation.

The 58th Annual Meeting of the House of Delegates of the Oklahoma State Medical Association adjourned at 10:55 a.m., May 2, 1964.

Recorded by Martina Doyle

Report of THE PRESIDENT

APPROVED IN PART (See report of Reference Committee No. 1)

For me this has been an eventful and never to be forgotten year. Beginning the first week with the notice that Lord Taylor was going to visit our State, and culminating during the past month in the death of our faithful and dedicated Speaker of the House of Delegates. Without the loyalty and dedication of the staff, and the very ultimate in cooperation and hard work by the Councils and Committees the burden would have been unbearable; but with them doing the work the direction became a pleasure!

That much has been done will become apparent when the reports come to this floor. I urge your careful consideration of each of them. This meeting has been arranged so as to give more time for full consideration of our problems. That much is still to be done will become apparent as the recommendations for further actions, and for new approaches, are noted in these reports. Your President has attempted at all times to keep in mind the policies and directions of the Board of Trustees and this House of Delegates, as well as the current events which have developed to give some insight into the future; and each Council and Committee have been made

aware of the existing policies and directions in their deliberations.

A review of some of the problems faced and some of the activities taken by this administration is in order; first that the membership be informed of events, and second that future actions might best be planned. This should first include a summary of the policies and objectives of your President. I believe that everything that has to do with the practice of medicine, from the training period to the final end results, is the business of the Association. I believe that each member of the Association should know what is going on, that it should be a part of the responsibility for each individual to find out, but it is first the responsibility of the Association and its officers to let them know. I believe that the ultimate goal of all medical affairs is to better care for patients and that the best ends of all physicians will be served by doing this to the best of our abilities. I believe that, regardless of what system is followed—what treatment is applied—what laws, rules or regulations are made—the final and ultimate goal cannot be obtained until the physician can transmit the results to the patient, and that only the physician can do this. Therefore, I believe that the physician-patient relationship is inviolable territory. I believe that in this changing time, this relationship must include socio-economic consideration; and it therefore becomes the duty and responsibility of each physician to acquaint himself well in all of these affairs and apply them in his dealings with his patients with the same diligence and wisdom and tact that he applies his knowledge to the treatment of the diseases and conditions with which his patient suffers. I believe that the profession and the Association have NOT kept pace with the changing conditions—feeling that we are in strange territories, and others should be more concerned than we—resulting in others assuming the job and making rules and regulations which we find to be impractical, intolerable, and dangerous

to our relationships with our patients, and equally as dangerous to the freedoms of our selves and our peoples.

With these beliefs I carried on the work of the Association. The district meetings were an attempt to bring to the physicians some of the problems which we face. All fourteen districts were visited, and approximately half of our physicians were directly contacted. Lay groups were met where the opportunity afforded. I RECOMMEND THAT THESE EFFORTS BE MADE A PART OF THE DUTIES OF YOUR OFFICIALS.

* * * * *

Coming early to attention were the mental health problems and the plans for the statewide survey. Realizing that here was an area where proposals and programs were sure to be forthcoming, we made every attempt to enlist the profession in an effort to provide suitable answers. We soon saw that the profession had no positive answers, so the first Mental Health Congress, which was authorized by this House last year, was directed toward an effort to establish professional policies. Your Council will present some recommendations for your sincere consideration. Meanwhile the Mental Health Survey is continuing throughout the state. Each of you will have opportunities to serve. Let us establish our policies now, and let each physician know what they are, and let your views be expressed when the survey comes to your community. Let this be one field where we are not caught short!

* * * * *

The Welfare situation has been boiling all year and is far from being settled. Many meetings have been held, and recommendations made. We have not, in any sense, been happy with the results. It is my considered opinion that during the coming year, with the legislature in session, events must come to a much more definite understanding. We are receiving much better co-operation from our allied professions. It has become all too apparent that all must work and stand together. We must: First, take care of the patients; Sec-

ond, fulfill our own agreements; Third, insist that all agreements of others be likewise fulfilled; Fourth, eliminate any abuses by our individuals; and Fifth, maintain dignity and professionalism in our activities. We must at all times be prepared to present our case to the public and to the legislative bodies. We will have no case without wisdom, realism, reliability, reasonableness, steadfast principles, and unanimity of thought and action. No proposal will work without the unqualified support of the profession. We must have unanimity on our part, and at present, this we do NOT have. I believe this to be one of the most important subjects that this House must consider—it cannot be taken lightly!

* * * * *

Our insurance programs have been issues of prime importance, especially our professional liability program. You will hear about this from the Council and Committee reports. Our program of preventive education received a set-back by the untimely postponement of our scheduled meeting; however, we are making every effort to recover from that, and during the next year each member should receive more information than ever before along this line. It is serious, when we consider that our state has gone from near the bottom in liability claims made, to very near the top—besides it is costing us money!

* * * * *

Realizing that this would be an election year, many of the efforts of the past year have been directed towards preparation for that. These efforts also fit in with the campaign against federalization of the profession. Our Operation Hometown has worked! At each district meeting opportunities were afforded for the profession to learn about OMPAC. This is a worthwhile effort, and one that has not delivered according to the potential that it has. Under no circumstances can we afford to disregard the facts of political life as they affect our Nation and our profession. We are far down on the

totem pole in this segment of our duties.

As a part of the functions of this effort the Legislative trip to Washington, D.C. was consummated. It was highly successful. It should be an annual affair, whether there are burning issues at hand or not. I RECOMMEND THAT THIS ASSOCIATION DO THAT.

* * * * *

A new effort that promises some very rewarding returns, is the establishment, with the approval of the Board, of the Committee on Medicine and Religion. The Committee has done outstanding work in implementing an entirely new idea, and having already produced local committees in many of the societies. I commend highly, to you, the first conference for Sunday, May 3rd. I believe you will begin to see another potent force in the care of patients that has been long overdue in being utilized to the fullest extent.

* * * * *

Time does not permit discussion of everything, so let us now look forward. Our buildings are now nearly ten years old. They are in need of repairs, some of which are under way. Our office space, especially storage, is becoming crowded. A preliminary survey was made to determine expression of interest in a joint building with some of our allied professions. Such interest exists. We have the ground space. I believe it would be possible and feasible for a joint construction effort, making more building space, more meeting facilities, and above all permitting joint facilities that are now not within our financial reach, that would greatly improve our efficiency and efforts, with savings in cost. I recommend that an Ad Hoc committee be established to investigate these possibilities and make recommendations from their findings to this House.

* * * * *

One situation that developed all too frequently during the past year with embarrassment to the profession and

to the association is the frequent press releases by individuals and groups that are given the status, either by the press or by an uninformed public, that these were the voice of the profession, and represent policy of the Association. I am sure some of this is unavoidable with an eager press and unthinking public. The State Medical Association should be the spokesman for the profession in the State of Oklahoma. I present this as a matter that needs the attention of the Association.

* * * * *

Our Association has no unified, coordinated policy of indoctrination of new members. The Association and the profession suffers as a result of this. Some of the larger societies have excellent programs, but these vary among themselves, and are not to be found in most of the smaller societies. We are derelict in our duties when we do not properly orientate the new physician just entering practice. A study should be made of this issue and recommendations made.

* * * * *

Other problems, not solved, and of a continuing nature that time does not permit discussion must be listed: The osteopathic problem, the medical school problems, our nurse-physician relationships, and the best utilization of our nurses and the allied professions; third parties which are with us, will remain, and must be taken into consideration whether we like it or not; area-wide hospital planning, especially the compulsory and non-arbitrary features that are implied by some of the proposals being made; legislative proposals, both those already known about as well as those that are sure to come with the next Legislature and Congress, not the least of those being, on a local level, the consideration of a fee schedule for Workmen's Compensation cases; physician and citizen lethargy and apathy; physician disregard of our problems, with more emphasis on self-policing; the natural tendency of professional people to maintain a "status quo" when such is impossible—as much so

in the socio-economic field as it is in the practice itself; and not the least of our impending problems is the injection of the catch-word phrase of "Total Health Care"—this promises to be as big an issue as that of "Care of the Aged"—and will certainly be ranked with God, Motherhood, and the Flag! Are we ready for these problems? Unfortunately NO!

It can be readily seen from the partial recitation above that we have work to do. I believe we have the brains in our profession to solve our problems. We do not have the money to buy our way out, even if this were feasible. We are drastically short of staff power. May I remind you that 90 per cent of our work is being done by volunteers. We have six staff members, two of which are specialized. They are overwhelmed with paper work alone. Time after time during the past year things have come to my attention which the staff had not even heard about. Meetings have come and gone with no one to even monitor the proceedings, much less to participate. I have been quite distressed about this, because if our business is anything that pertains to medicine, then we should at the very least, be posted on the subject.

Permit a few statistics: During the past year your President has traveled approximately 30,000 miles and spent more than 100 eight hour days, not counting travel time, in your services. How much time and how many miles other officers, Council members, Committee members and others have served is astounding. I do not, for a minute, wish to leave the impression that I begrudge a moment of this, because even then, not all was done that should have been done. The fact remains that you are asking and expecting volunteers to do a lot of work for you that hired help should be doing. Nor do I want to convey the idea that our hired help has been delinquent—I kept them busy! In addition, much of the work and contacts, rightfully belongs to a physician, and it is not duties that our present staff

could handle.

Therefore, I recommend that this Association provide enough dues to hire a full time physician, as an Executive Vice-President, to more properly carry out some of the functions that we should be doing.

* * * * *

Our Association lacks continuity of effort from year to year. This was brought forcibly to my attention with assumption of my duties, to find that the President wrote the program for the year. The President should have the prerogative of having an individual program, but the Association needs a progressive, five or ten-year plan that would be a continuing vital effort to meet our needs.

I believe this could be best accomplished by having a planning commission, with staggered terms, composed of our most able men, whose duties it would be to study and recommend actions and plans for the Association from year to year. I recommend this.

* * * * *

This same commission, recommended in the last paragraph, might well be used to help us solve what I believe to be the greatest failure of the Association: **WE ARE DERELICT IN THE ESTABLISHMENT OF DEFINITE POLICY ON THE VITAL ISSUES.**

Far too many times during the past year it has come to my attention that the Association had no definite policy on this or that issue. The mental health problem serves as one of the best examples. I can never believe that **NO ANSWER** can ever be the best answer; and most especially so when it is so obvious that some kind of an answer is to be forthcoming. We must stop permitting answers to be made, and then find ourselves on the defense, because we have not given an answer in the first place. If I could dictate but one policy to you it would be: **HAVE A POLICY TO HAVE A POLICY** on every question that arises within our domain, immediately and forthwith, without pressure,

and with due deliberation. To do that, we must keep constantly informed. We must look constantly forward at the trends, and be able to reasonably predict future trends and issues. Far too many times in the past we have waited until an issue comes to a head, only to find that answers have already been written. We have not acted until the pressures have built up about us. This puts us automatically on the defense. We must then prove ourselves rather than to put the burden of proof on an opposing principle. Gentlemen, it is later than you think!—But I hope not too late! To insure that it is not too late, however, we can no longer afford the luxury of wishful thinking, or waiting to see if the big bad issue will go away! It will not!

* * * * *

It would be amiss for me to close without giving final recognition to all the fine workers that have helped me in my work the past year. The staff has done outstanding work. They were so dedicated that I felt it necessary to insist that they take their allotted vacation time. My Council chairmen, and members, and Committeemen have travelled many miles, and labored many hours in your behalf. I am proud of them. You owe them a big debt of gratitude. I would like for you to give especial honors to the Council chairmen: Doctor Ennis M. Gullatt, of the Council on Socio-Economic Affairs. His big headache has been the Welfare Department.

Doctor Hayden Donahue, Council on Public Health—Primarily concerned this year with the problems related to Mental Health, and arranged a most excellent Mental Health Congress.

Doctor Dave B. Lhevine, Council on Insurance. He has done a lot of sweating about your liability insurance.

Doctor R. R. Hannas, Council on Professional Education. He arranged your regional post-graduate courses, and others, and is primarily responsible for the fine program you will hear in this meeting.

Doctor Rex E. Kenyon, Council on Public Policy. If any man spent as much time or travelled as many miles as I did, he is the one. He has an excellent Operation Hometown going, and has been watchdog over many issues.

Gentlemen, these men have worked!

We cannot yet know the fruits of our efforts. We do know that the work has not all been done, nor will it ever end. We can only hope that we have helped to make the way a little easier for those to come. Many other things were done that have not been herein listed; but many things were not done that should have been done. I made mistakes. Those that I know about I have attempted to correct or to make proper amends for; those that I do not yet know about I can only hope are not irreparable.

I am not in the mood to sing the old refrain about the old soldiers. I can only say that I have enjoyed serving you—that it has been my greatest honor—and one that I can never forget. My only apology is that I could not have done more. I make no apologies to you for saying, "I tried."

Report of the TREASURER

APPROVED (Note recommendations of Reference Committee No. 1)

This report contains an estimated financial statement for the fiscal year ending May 31st, 1964, and budgets for the next fiscal year.

Since association finances are not audited until the completion of the fiscal year, it is necessary to present an estimate of the year-end financial condition to the House of Delegates during the annual meeting. However, the certified auditor's report will be mailed to all members of the House promptly after its completion.

Expenditures during the past year will closely conform to the budget. It was estimated at the beginning of the current fiscal year that the association would show a surplus of approximately \$3,600.00 on May 31st,

1964. Our estimates at this time indicate a surplus for the year of \$1,998.98.

Advertising revenue for the *Journal* of the OSMA continues to decline. While production expenses have remained level, advertising will be down about \$5,000.00 for the year and the association will therefore suffer a corresponding loss in the overall journal operation.

The decline in advertising revenue for medical association sponsored publications is a national problem, and the OSMA *Journal's* loss is not out-of-step with the national scene. However, efforts are being accelerated by the national sales agency, the State Medical Journal Advertising Bureau, and by the OSMA staff

to restore the journal operation to at least a break-even basis.

The 1964 Membership Directory was published at a nominal profit through advertising sales.

Regarding the general accounting practices and budget control procedures of the association, it is felt that conversion to a fiscal year (to conform to the organizational year of the OSMA) and the preparation of quarterly "Budget Comparison Reports" have contributed to vastly improved control of association funds.

The estimated annual financial statement is presented as an attachment to this report.

1964-65 Budgets

Two separate budgets are presented for the new organizational year beginning June 1st, 1964 and ending May 31st, 1965. For "Organizational Activities," we are anticipating a

surplus of \$2,150.00. Dues income will be enhanced by the \$10.00 per year dues increase which was effective January 1st, 1964, and the bulk of this increased revenue has been allocated to the Council on Public Policy.

To comply with postal regulations which require "paid subscriptions" to the OSMA *Journal*, and to partially offset losses being incurred in this operation due to declining advertising sales, \$3.00 from each member's annual dues is being transferred to the *Journal* budget. Even so, the 1964-65 budget for journal operations is estimated to result in a loss for the forthcoming year's operation.

The estimated financial statement for the 1963-64 organizational year, and Budgets A and B for the 1964-65 year are presented herewith for the approval of the House of Delegates.

FINANCIAL STATEMENT

(Estimated for Year Ending May 31st, 1964)

INCOME

Membership Dues	\$78,000.00
Scholarship and Loan Fund (from dues)	8,500.00
Journal	26,250.00
Membership Directory.	2,100.00
Annual Meeting	9,800.00
Interest from Savings	2,370.00
AMA Grant—Mental Health Conference	1,021.50
Miscellaneous	780.00

TOTAL INCOME	\$128,821.50
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EXPENSE

Fixed Expenses	\$57,000.00
Depreciation	2,000.00
Councils and Committees:	
Public Policy	\$9,200.00
Insurance	43.00
Professional Education	1,800.00
Socio-Economic Activities	—
Public Health	350.00

11,393.00

Travel-In-State	1,600.00
Travel-Out-State	6,250.00
Membership Directory	1,579.52
Annual Meeting Expense	7,500.00
Scholarship and Loan	8,500.00
Journal	31,000.00

TOTAL EXPENSE	\$126,822.52
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NET SURPLUS	\$ 1,998.98
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SAVINGS

Ponca City Savings & Loan (1957)	\$10,000.00
Home Savings & Loan (Lawton) (1957)	10,000.00
Home Savings & Loan (Bartlesville)*	10,000.00
Durant Building & Loan (1960)	10,000.00
Tulsa Federal Savings & Loan (1961)	10,000.00
Oklahoma City Federal Savings & Loan** (1/31/64)	6,320.56
Earned Interest as of 5/31/64	1,016.12
TOTAL	\$57,336.68

*1959—\$2,798.16

1960— 7,201.84

**1961— 1,860.27

1962— 2,224.22

1963— 2,236.07

BUDGET A—ORGANIZATIONAL ACTIVITIES

INCOME

Membership Dues	\$ 86,500.00
Journal Subscriptions (from dues)	3,500.00
Scholarship and Loan Fund (from dues)	8,750.00
Interest from Savings	2,600.00
Miscellaneous Income	800.00
Annual Meeting—Booth Rental \$7,400.00	
Ticket Sales 2,400.00	
	<hr/>
	9,800.00

TOTAL INCOME \$111,950.00

EXPENSES

Fixed Expenses	\$ 58,000.00
Depreciation	2,000.00
Journal Subscriptions (from dues transferred to Journal)	3,500.00
Councils and Committees:	
Public Policy	\$15,000.00
Insurance	1,000.00
Professional Education	2,400.00
Socio-Economic Activities	500.00
Public Health	1,200.00
	<hr/>

20,100.00

In-State-Travel 1,500.00

Out-State-Travel 6,500.00

Annual Meeting:

Guest Speakers	\$ 2,200.00
Hotel	1,200.00
Decorations	750.00
Dinner, Luncheons	1,700.00
Entertainment	1,600.00
Printing, Promotion	800.00
Miscellaneous	1,200.00
	<hr/>

9,450.00

Scholarships and Loans 8,750.00

TOTAL EXPENSE \$109,800.00

NET SURPLUS \$ 2,150.00

BUDGET B—JOURNAL, MEMBERSHIP DIRECTORY

INCOME

National Advertising	\$20,000.00
Direct Advertising	8,000.00
Subscriptions (from dues)	3,500.00
Subscriptions (non-member)	300.00
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	\$ 31,800.00
Membership Directory:	
Sales of Copies	300.00
	<hr/>
TOTAL INCOME	\$ 32,100.00

EXPENSE

Printing	\$22,000.00
Engraving	850.00
Art Work	450.00
Salaries	8,400.00
Travel, Dues	450.00
Miscellaneous	300.00
	<hr/>
TOTAL EXPENSE	\$ 32,450.00
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NET LOSS	(\$350.00)

Report of the BOARD OF TRUSTEES

*APPROVED (Note recommendations
of Reference Committee No. 1)*

Board Actions

Three meetings of the Board of Trustees were called during the past year. Business was transacted on July 14th and March 22nd, but a November 24th meeting was not officially convened due to lack of a quorum.

Below is a summary of major items of business transacted by the Board.

1. The disciplinary action taken by a county medical society against one of its members was appealed to the Board of Trustees. A hearing was held and the Board sustained the position of the county medical society. The aggrieved physician then filed an appeal with the Judicial Council of the American Medical Association which resulted in the AMA generally supporting the positions taken by the state and county medical societies.

2. The Board furnished the governor with the names of fifteen OSMA members, from which the following physicians were appointed to serve

on the Oklahoma State Board of Medical Examiners:

Marshall O. Hart, M.D., Tulsa
Francis A. Davis, M.D., Shawnee
Edgar W. Young, M.D., El Reno
Doyle E. Johnson, M.D., Enid
John M. Moore, M.D., Pauls Valley
C. J. Roberts, M.D., Enid
E. F. Lester, M.D., Oklahoma City

3. Based upon nominations submitted by the President, the Board appointed an OSMA Executive Committee comprised of: Joe L. Duer, M.D., Woodward; J. Hoyle Carlock, M.D., Ardmore; Wilkie D. Hoover, M.D., Tulsa; Malcom E. Phelps, M.D., El Reno; Harlan Thomas, M.D., Tulsa; R. R. Hannas, Jr., M.D., Sentinel; Mark R. Johnson, M.D., Oklahoma City; and, Marshall O. Hart, M.D., Tulsa.

4. A request from the Commissioner of Health was considered in regard to the physician representative on the State Hospital Advisory Council for the Hill-Burton Program. The Commissioner, Doctor Kirk T. Mosley, asked for the Board's recommendation of a physician to serve in this capacity and further requested a recommendation as to the tenure of such appointment. The Board of Trustees nominated W. K. Haynie,

M.D., Durant, to succeed himself on the advisory council and recommended a tenure of two years.

5. The State Health Department also requested five nominees to fill two appointments on the Hospital Licensure Advisory Council. The following physicians were appointed, based upon the Board's nominations: George T. Ross, M.D., Enid, and Roger Reid, M.D., Ardmore.

6. Three physicians were nominated by the Board to fill one appointment to the Health Department's Advisory Council for Rest Homes, Nursing Homes and Specialized Homes. E. K. Norfleet, M.D., Bristow, was appointed to this position.

7. The Department of Public Welfare requested three nominations for one position on the Professional Advisory Committee on Medical Care for Crippled Children. Based upon the Board's nominations, C. M. Hodgson, M.D., Kingfisher, was re-appointed for another term.

8. The Department of Public Welfare also requested three nominations from which one physician would be appointed to serve on the Professional Advisory Committee to the Department of Public Welfare. Wilkie D.

Hoover, M.D., Tulsa, was re-appointed based upon the Board's nominations.

9. A \$250.00 contribution was made by the Board of Trustees to the essay contest sponsored by the Governor's Committee on Employment of the Handicapped. The funds were used to pay the travel expenses to the national contest for the teacher of the first-place state winner.

10. The Board authorized \$250.00 in prize money for the annual essay contest of the state chapter of the Association of American Physicians and Surgeons.

11. The Board supported the recommendation of the OSMA Council on Public Health in endorsing the Cornell University Automotive Crash-Injury Research Project which is now underway in Oklahoma.

12. The Board approved the State Health Department's application for a federal grant (\$161,640) under the U. S. Vaccination Assistance Act. However, the approval was qualified with the proviso that the grant should be used for education, epidemiology, communicable disease surveillance, immunization status surveys, and for certain laboratory diagnostic procedures (particularly for polio and diphtheria).

13. At the request of the Woman's Auxiliary to the OSMA, an Advisory Board was appointed, consisting of Tom C. Sparks, M.D., Ardmore, A. T. Baker, M.D., Durant, Joe L. Duer, M.D., Woodward, and R. R. Hannas, Jr., M.D. Sentinel.

Membership

The following membership figures are reported as of this date:

Dues-Paying Members	1,770
Applications Pending	31
Honorary-Life Members	115
Junior Members	30
Associate Members	4
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Total	1,950

Honorary-Life Memberships have been requested by county medical societies for the following physicians:

- Paul V. Annadown, M.D., Sulphur
- C. W. Arrendell, M.D., Ponca City
- Gladys K. Dolan, M.D., Tulsa (posthumously)

- E. N. Fair, M.D., Heavener
- E. Halsell Fite, Sr., M.D., Muskogee
- R. N. Holcombe, M.D., Muskogee
- W. A. Howard, M.D., Chelsea
- J. Holland Howe, M.D., Ponca City
- W. E. Jones, M.D., Seminole
- Jesse Bateman Lambert, M.D., Norman
- James O. Lowe, M.D., Tulsa
- W. R. Marks, M.D., Vinita
- Laile G. Neal, M.D., Ponca City
- C. F. Needham, M.D., Ada
- John R. Reid, M.D., Oklahoma City
- T. R. Roberts, M.D., Tulsa
- J. H. Robinson, M.D., Oklahoma City
- Mary V. S. Sheppard, M.D., Oklahoma City
- Robert M. Shepard, Sr., M.D., Tulsa
- M. V. Stanley, M.D., Tulsa
- H. B. Stewart, M.D., Tulsa
- Karl F. Swanson, M.D., Tulsa
- Frank R. Vieregg, M.D., Clinton
- Orange E. Welborn, M.D., Ada

Journal

Despite unavoidable loss of advertising revenue, the Board of Trustees commends the Editorial Board for the excellence of the OSMA publication. Indeed, if other state medical associations would produce a journal of comparable quality, national advertising sales for the state journal group would not have declined to the present level.

The Board of Trustees encourages the continued publication of the *Journal of the Oklahoma State Medical Association*, and urges each member of the Association to supplement the efforts of the Editorial Board by contributing scientific and news articles for publication, by reading and constructively criticizing the *Journal*, and by using representatives of pharmaceutical manufacturers to inform their employers of the value of the publication as an advertising medium.

Annual Meeting

A year-long survey and study of the OSMA Annual Meeting has resulted in several innovations for the 1964 event. First, the House of Delegates meeting has been divided into

two sessions and so arranged to avoid conflict with major portions of the scientific program. In addition, sections of the scientific program are comprised of integrated presentations which have been selected because of their broad appeal to most disciplines of medical practice. Subjects are to be treated in depth, informal audience discussion is provided for in most sections of the program, and a great many Oklahoma physicians are contributing their time and talents in planning and presenting scientific material.

Last year's study committee and this year's program committee are commended for their efforts to bring about the 58th Annual Meeting of the OSMA . . . "Renaissance '64."

Student AMA Banquet

The Association sponsored the annual banquet of the University of Oklahoma Chapter of the Student American Medical Association on November 22nd, 1964. More than two hundred students and their wives and dates attended the event, which featured the University of Oklahoma's Stewart Harral as speaker.

Supplemental Report
of the
BOARD OF TRUSTEES

The following action was taken by the Board of Trustees at its Annual Meeting, April 30th, 1964:

1. *Treasurer's Report*: Approved.
2. *Council on Public Health*: Accepted the report with the following recommendation in regard to Section I (A): That the State Health Department furnish the Oklahoma State Medical Association with a breakdown of expenses incurred in this program to date.
3. *Council on Socio-Economic Activities*:
 - Section I. Passed without comment.
 - Section II. Received by the Board and passed on to the House.
 - Section III. Board recommends that the chairman of this committee should not be a permanent office, and that the President should have the prerogative of choosing his committee members.

Section IV. Approved.

Section V. Board recommends disapproval of this section of the report.

4. *Council on Professional Education*: Moved to approve this report and commend the chairman.

A. *Financial Aid to Education Committee*: Approved.

5. *Council on Public Policy*: Recommended approval of this report.

6. *Council on Insurance*: Moved to accept report.

7. *Grievance Committee*: Moved to accept report.

8. *New Resolutions*:

No. 31. Memorial Resolution to Marshall O. Hart, M.D. Board moved to submit this resolution to the House of Delegates.

No. 32. Congressional Correction of Discriminatory Practices Against the Self-Employed. Board moved to submit this resolution to the House of Delegates.

9. Doctor Duer announced the appointment of Clinton Gallaher, M.D. as Vice-Speaker of the House of Delegates and asked for and received approval of the Board.

Report of the COUNCIL ON INSURANCE

(APPROVED)

Dave B. Lhevine, M.D., Chairman

C. Alton Brown, M.D.

William R. Cheatwood, M.D.

Richard E. McDowell, M.D.

E. C. Mohler, M.D.

Nolen L. Armstrong, M.D.

Wylie G. Chesnut, M.D.

C. E. Woodard, M.D.

The Council represents the association in relation to the OSMA Disability Income Program, the OSMA Overhead Expense Program, the OSMA Group Term Life Program, and the OSMA-approved Professional Liability Program.

Section I.

Disability Income Insurance

The disability income insurance program is underwritten by the Insurance Company of North America, a top-rated company with assets exceeding \$1 billion. It is administered

by C. L. Frates and Company, Oklahoma City.

As of March 1st, 1964, 784 OSMA members are participating in the program (65 per cent of those eligible) and the premium income for 1963 was \$148,345.48. During 1963, \$71,649.67 was paid out in claims to policyholders. Since the program was converted to I.N.A. in 1961, total premium income has been \$375,845.77, and total claims paid amounts to \$133,897.77.

Thus, it may be seen that the loss ratio has been exceptionally good, and we are pleased to report that the insurance company is recognizing this favorable experience by increasing the disability income benefits available to OSMA members. The new program is being inaugurated by C. L. Frates and Company during this annual meeting, and it is recommended that all physicians attending the meeting stop by the OSMA Insurance Booth on the 14th floor of the Skirvin and discuss the plan in detail with representatives of the agency.

Under the present I.N.A. program, physicians can choose from \$200.00 to \$600.00 monthly indemnity against disability resulting from loss of income due to accident or illness. On an optional basis, sickness benefits are payable for either three or five years. Lifetime accident benefits are payable on all policies. Optional waiting periods, ranging from nil on accident and seventh day on illness to 180 days for both accident and illness, are available to suit the variable needs of OSMA members. In addition, a \$5,000.00 death and dismemberment benefit with a partial disability clause is offered.

Under the liberalized program which is now in effect, the present benefits and options are maintained but, in addition, a physician may increase his monthly indemnity to \$800.00 a month and may indemnify himself up to age 65 for disability resulting from illness.

Your Council on Insurance has studied other group insurance plans available to Oklahoma physicians, and is satisfied that the I.N.A. pro-

gram administered by C. L. Frates and Company offers lower cost, greater flexibility, and more comprehensive benefits than competing plans.

Section II.

Overhead Expense Insurance

The overhead expense program is underwritten by the Continental Casualty Insurance Company and administered by C. L. Frates.

Your overhead expense program is designed to indemnify you against the cost of keeping your office open while you are disabled by reason of accident or illness.

Up to \$1,000.00 a month in benefits may be purchased for your protection against necessary office expenses while you are disabled. Benefits are payable for up to 18 months, six months longer than most competitive plans. The waiting period for benefits to begin following disability is optional, either 15 or 30 days.

As of March 1, 1964, 159 physicians were protected under the overhead expense program. Premium income is approximately \$20,173.16 per year, and in 1963, \$3,908.17 was paid out in claims. Another year of favorable experience should enable us to negotiate further improvements in the program.

Section III.

Group Term Life Insurance

The group term life insurance program is underwritten by the Massachusetts Mutual Life Insurance Company and administered by agent Walter C. Wilson, Oklahoma City. As of April 1st, 1964, 409 OSMA members were insured.

Since the inception of the program in 1956, total claims have been incurred of \$595,000.00, and the total premiums collected have amounted to \$592,961.00. Dividends to participating physicians have been \$9,628.30. When administrative costs, taxes and commissions are added to claims paid, the total cost of the program since 1956 has been \$667,613.00.

During the policy year ending March 31st, 1964, \$127,500.00 has been paid out in claims as compared to premium income of \$85,757.00.

As a result of the unfavorable loss experience, Massachusetts Mutual notified the Council on Insurance that a substantial rate increase would be necessary on April 1st, 1964.

Your Council studied the proposed rate increase and found it to be justified in view of the unfortunate circumstances. However, the Council observed that a substantial increase in premium would probably result in the cancellation of many policies held by younger physicians and the retention of policies held by physicians in the older age group, thus endangering the loss picture and program stability for future years.

Therefore, an effort was made to meet the problem of continuing losses by re-designing the program, in lieu of absorbing what was thought to be a fatal across-the-board premium increase.

Whereas the former program offered a stable death benefit (up to \$20,000.00) and a premium which increased as the insured grew older, the revised plan offers a stable premium with a decreasing death benefit.

Under the new program, a standard annual premium of \$125.00 is charged. Death benefits range from \$33,125.00 at age 25 to \$2,250.00 at age 69. Through age 41, the death benefits exceed those offered under the former plan. Waiver of premium, accidental death and dismemberment benefits are included in every policy (triple indemnity for accidental death while traveling on a common carrier).

Converting to the new plan enabled your Council on Insurance to prevent a rate increase. As a matter of fact, the premium cost per one thousand dollars of death benefit has been reduced to the point that it is the lowest premium cost available to Oklahoma physicians from any source. Using a physician age 40, for example, under the new plan he would receive \$21,625.00 protection for \$5.78 premium per one thousand dollars of benefit, while under the old plan he would have \$20,000 pro-

tection for \$10.53 premium per thousand.

Recognizing that older members of the OSMA may be more desirous of preserving the amount of death benefit than in saving premium dollars, the Council on Insurance arranged for the optional retention of the former group term life insurance plan. However, because of the higher risk associated with the older group of physicians, who would most likely retain the old program, a 50 per cent increase in premium is necessary to offer this option.

As another feature of the conversion to a new concept in the life insurance program, physicians who lose a portion of their death benefit by changing to the new plan may retain the resultant loss in death benefit by taking out an individual life insurance policy for the amount of the loss, and may do so without evidence of insurability. For example, physician age 51 has \$20,000.00 death benefit under the former OSMA program, which would be reduced to \$9,500.00 under the new plan. He could convert the \$9,500.00 to the new term life insurance program and replace the amount of death benefit lost by taking out an individual life policy for \$10,500.00.

Your Council on Insurance regrets the necessity of disturbing the group life insurance program, but sincerely believes that the best possible decision was made under the circumstances. The new plan is so attractive in price to younger members of the association that enrollment should greatly increase and thereby bolster the stability of the program.

It is pointed out that group programs, by their nature, are controlled by participation and loss experience. If loss experience is favorable, benefits are increased or the premium may be lowered. If experience is unfavorable, as in the case of the OSMA group term life insurance program, the loss ratio must be corrected.

Your Council has endeavored to meet the problem by re-designing the program to the benefit of the majority of Oklahoma physicians.

The OSMA Board of Trustees has approved our action.

You are urged to visit the OSMA Insurance Booth on the 14th floor and discuss the program with Mr. Wilson.

Section IV.

Professional Liability Insurance

The association has approved the professional liability insurance program offered by the St. Paul Fire and Marine Insurance Company, and the majority of OSMA members are so protected.

Last year, a 20 per cent premium increase was established by the company, based upon what was reported to be an unfavorable loss ratio (premium income as compared to paid losses, loss reserves and expenses). It was hoped that the increase would correct the situation.

However, the company reports a loss ratio of 135 per cent for the year of 1963, and has again requested a rate increase. Rates are to be increased to the level of the National Bureau of Casualty Underwriters. Thus, for the first time since the inception of our program with St. Paul in 1952, association members will have no premium advantage in regard to participating in the program offered by the association-approved carrier.

Your Council on Insurance is presently surveying other major insurance companies which write professional liability insurance to determine if the association is receiving the best possible plan available. Comprehensive research is being undertaken, with the valuable assistance of Mr. Rod Frates, OSMA Insurance Counselor, and the Council anticipates that a full report and recommendations can be made in the very near future. However, the survey is not completed at this time, and the Council's immediate recommendations are to accept the St. Paul rate increase and to launch an intensive educational program aimed at claims prevention.

The first major effort to reduce the growing number of unmeritorious claims was the March 8th OSMA Conference on Professional Liability,

held in Oklahoma City. This meeting was attended by officers from the majority of county medical societies of the state.

In addition, the Council plans to conduct a series of regional meetings on the subject in the Fall and Winter of 1964. Physicians from counties surrounding the meeting sites will be offered a comprehensive course by a team of well-informed speakers representing the medical and legal professions and the insurance company.

Other planned educational activities include the publication of articles on the subject in the *OSMA Journal*, direct mail correspondence with OSMA members, and other projects still in the formative stages.

St. Paul is exhibiting at this annual meeting, on the 14th floor of the Skirvin Hotel.

Report of the
COUNCIL ON PROFESSIONAL
EDUCATION
(APPROVED)

Council Members

R. R. Hannas, M.D., Chairman
E. E. Shircliff, M.D.
Roger Reid, M.D.
S. N. Stone, Jr., M.D.
H. E. Denyer, M.D.
Donald L. Brawner, M.D.
Irwin H. Brown, M.D.
Orange M. Welborn, M.D.
Wendell L. Smith, M.D.
Cleve Beller, M.D.
B. C. Chatham, M.D.
John R. Taylor, M.D.

Eight Regional Postgraduate Courses were held in Ada, Altus, Lawton, Bartlesville, Woodward, Durant, Enid and Miami. Subjects presented were the "Pancreas," "Small Intestine," "Heart," and "Central Nervous System." Total attendance this year was higher than for any previous year. Acceptance throughout the state would indicate that these courses should be continued.

Fourteen Educational Television shows have been sponsored. Some were borrowed from Utah and some

were "homegrown." It is difficult to determine the size of the audience for these programs, but this we are studying and again it appears that we have a worthwhile project.

Members of this Council have devoted considerable time and thought to the planning of the Scientific Sessions at our Annual Meeting, and we hope the membership will enjoy and approve the Scientific Renaissance.

Because of the complete cooperation of Irwin Brown, M.D., Director of the Postgraduate Office at the University of Oklahoma Medical School, our job is made much easier, and we again wish to thank him wholeheartedly.

The Scholarship and Loan Fund Committee will report separately.

Recommendations:

1. That the Regional Postgraduate Courses be continued and that the sum of \$1,200.00 be allotted for use as needed in this regard.

2. That the Educational Television Courses be continued and that \$1,200.00 be allotted to defray these expenses.

Report of the
FINANCIAL AID TO EDUCATION
COMMITTEE
(APPROVED)

During the preceding organizational year, the committee was comprised of: J. Hoyle Carlock, M.D., Chairman, Clinton Gallaher, M.D., Walter E. Brown, M.D., Joe L. Duer, M.D., and Harlan Thomas, M.D.

A report on deposits, disbursements and obligations since the inception of the OSMA Loan and Scholarship program appears below:

I. Scholarships

Deposits to Scholarship Fund \$5,000.00
Scholarships Awarded:

William H. Smith, II	500.00
John F. Schumacher	500.00
Muriel E. McGlanery	500.00
Edward Gwin, IV	500.00
John A. Junker	500.00
Johnny H. Jones	500.00
William W. Wallace	500.00
Robert B. Livingston	500.00

Don A. Wilson	500.00
Gene C. Cunningham	500.00
Total	\$5,000.00
Balance	—0—

(The five scholarship winners for the 1964-65 academic year have been selected. They are: Alan B. Menefee, Ada; Gary M. Moore, Oklahoma City; Sidney R. Matthews, Wilson; Sherman B. Lawton, Norman; and, Raymond L. Cornelison, Oklahoma City.)

II. Loans

Deposits to Loan Fund	\$11,114.44
Loans	
Disbursed (14)	\$3,750.00
Loans-In-	
Process (12)	4,650.00
Total	\$ 8,400.00
Balance	\$ 2,714.44

III. Grants

Deposits to Fund	\$1,000.00
Grants (0)	—0—
Balance	\$1,000.00

(It is anticipated that additional loans will be processed before the next OSMA deposit is made next September.)

The foregoing statement of the financial condition of the program has been certified as correct by the OSMA Executive Secretary and by the Business Administrator of the University of Oklahoma Medical Center, custodian of the funds.

IV. Recommendation

Since your committee is unable at the present time to provide tax deductibility in regard to special gifts made to the fund (above and beyond the \$5.00 allocation from each member's annual dues), some consideration has been given to the establishment of the fund as a charitable corporation.

The OSMA legal counsel has been consulted, and he advises that an exemption certificate from the Treasury Department can most likely be obtained if the operation is converted to a charitable, non-profit corporation under the laws of Oklahoma.

Therefore, your committee recommends that the House of Delegates of

the Oklahoma State Medical Association, assembled in Oklahoma City on May 2nd, 1964, authorize the conversion of the Oklahoma State Medical Association Loan and Scholarship Fund to a charitable, non-profit corporation, and that application be made for a tax exemption certificate.

Report of the
COUNCIL ON PUBLIC HEALTH
(APPROVED AS AMENDED)

Council Members

Hayden H. Donahue, M.D., Chairman
Gifford H. Henry, M.D.
Don H. O'Donoghue, M.D.
John W. Records, M.D.
Kirk T. Mosley, M.D.
John X. Blender, M.D.
John W. Shackelford, M.D.
Ella Mary George, M.D.
Francis A. Davis, M.D.
J. Walker Morledge, M.D.
George H. Guthrey, M.D.
William H. Reiff, M.D.
Robert L. Loftin, M.D.
Avery B. Wight, M.D.
Joe M. Parker, M.D.
Nolen L. Armstrong, M.D.
William K. Ishmael, M.D.

The Council on Public Health is comprised of the following committees:

Disaster Medical Care: Gifford H. Henry, M.D., Chairman
Rehabilitation: William K. Ishmael, M.D., Chairman
Perinatal Problems: John W. Records, M.D., Chairman
Maternal Mortality: John W. Records, M.D., Chairman
Mental Health: George H. Guthrey, M.D., Chairman

SECTION I

SPECIAL COUNCIL ACTIVITIES

A. *Immunization Education*: At the direction of the House of Delegates, per their approval of last year's Council report, the Council sponsored, in cooperation with the State Health Department, "Health Protection Week" for the second consecutive year.

While the State Health Department was not a co-sponsor participant in the program last year, the complete cost for underwriting this year's pro-

ject was borne by the state agency. The financing was made possible by the State Health Department's receipt of an approximate \$160,000.00 immunization education grant last Fall.

"Health Protection Week," a statewide immunization education campaign, was conducted April 12th through 18th, 1964.

The purpose for the immunization education project was to improve the level of immunization in Oklahoma for tetanus, whooping cough, diphtheria, smallpox and poliomyelitis. The theme used in promoting the public information program focused attention on the family physician and emphasized the need for Oklahomans to see him about bringing vaccinations up to date.

Waiting room posters were mailed to each physician in the state for their use during the event.

The OSMA and State Health Department distributed prepared slides and supporting announcements to all Oklahoma television stations. State radio stations were supplied with prepared spot announcements for their continuous use during the project week.

Newspapers, moreover, were furnished with prepared editorials or background information, and news releases for continuous use during the week-long activity.

Recommendations: Regarding immunization education, the Council requests House of Delegates authority to conduct "Health Protection Week" again next Spring, if deemed advisable in view of the State Health Department's plans to spend an approximate \$160,000.00 in this subject area under conditions of the two-year grant. The Council will maintain liaison with public health officials regarding immunization education projects to be financed with the tax funds.

B. *Cornell Automotive Crash Injury Research Study*: At the request of the Council, the Board of Trustees on July 14th, 1963, endorsed OSMA participation in the Cornell Automotive Crash Injury Research Study—a two-year research project de-

signed to obtain reliable data on the frequency, nature, and specific causes of injury to occupants of passenger cars and trucks involved in accidents. Medical data submitted by physicians treating accident victims is matched with information on injury causes and accident data supplied by state patrol officers and is submitted to Cornell University for analysis and statistical tabulation. Cornell's research findings are transmitted to automobile manufacturers in the form of recommendations for improvement in safety design and engineering features.

Since January 1st, 1964, active case research studies have been underway in Highway Patrol districts 4 and 7 and will continue through June 30th. The study will then concentrate on two other patrol districts and follow the same six-month study pattern until all ten Oklahoma Highway patrol districts have been involved in the study.

Others participating in the crash injury study include the Oklahoma State Health Department, Oklahoma State Highway Patrol and Oklahoma Hospital Association.

Recommendation: The Council urges continued participation in the two-year study which began January 1st, 1964, and that an adequate release for confidential information be secured on each case.

SECTION II

Disaster Medical Care Committee: Two years ago, the OSMA assumed leadership in inaugurating the Medical Self-Help Training Courses. These courses have been carried out very successfully this year throughout the entire state.

Under the supervision and guidance of Oklahoma Civil Defense, the State Health Department, this committee, and with the approval of the local county medical society, these courses were taught. To date, 3,365 students have completed the Self-Help Training Course in Oklahoma.

In the area of Hospital Disaster Planning, the Council on Public Health approved the selection of Stillwater as a site location for an addi-

tional 200-bed emergency hospital. The total number of pre-positioned civil defense emergency hospitals in Oklahoma is 18—with eight more sites approved for same.

Recommendation: That the OSMA continue its participation in Disaster Medical Care activities.

SECTION III

Rehabilitation Committee: The committee is happy to report that the Vocational Rehabilitation Division of the State Department of Education is working very well with physicians across the state.

During the year, the Vocational Rehabilitation Division has hired a full-time medical consultant; area advisors working under the Department have been selected and an evaluation team was created, whose job it is to go into communities and evaluate prospective patients and individuals in need of rehabilitation guidance.

The committee feels the rehabilitation first line of defense remains the private physician in the community who evaluates the patient from the standpoint of his medical or surgical needs.

SECTION IV

Perinatal Mortality Committee: The objective of the Perinatal Mortality Committee is the same as the objective of the Committee on Maternal and Child Care of the American Medical Association as stated in the AMA's "Guide for the Study of Perinatal Mortality and Morbidity," Revised Edition, 1962:

"The objective of perinatal mortality and morbidity studies is to improve the reproduction of normal human beings. The elimination of deaths and damage during the process of reproduction is the ideal for which we should strive. In working toward the objective with this ideal in mind, all individuals and committees should rigidly and courteously adhere to scientific and ethical principles."

This committee has met once during the year. It was decided that one

of the best means to arouse interest in and encourage the study of perinatal mortality and morbidity would be to present, upon request before county medical society meetings and hospital staff meetings, demonstration Perinatal Mortality Conferences; the personnel to present these conferences to be made up of members of the committee and of physicians from the faculty of the interested departments in the Medical School. These arrangements were made in cooperation with the Office of Post-Graduate Education of the University of Oklahoma School of Medicine.

Notice of the availability of these demonstration conferences was published in the *Journal of the Oklahoma State Medical Association* and requests were received from Chickasha, McAlester and Clinton.

These programs were well received. The demonstration team was made up of obstetricians, pediatricians, a pathologist and a moderator—usually an obstetrician or general practitioner in the community where the program was presented.

The committee is anxious to extend the work of these demonstration teams and make it available to all areas of the state.

SECTION V

Maternal Mortality Committee: The objective of this committee and of its studies is to improve the practice of obstetrics in the state in order to eliminate, insofar as possible, deaths and damage during the process of reproduction. The committee believes that its studies should be published regularly in the *Journal of the Association*, and that the State Association and the component county societies should encourage the dissemination of the results of the studies by lending support to programs featuring this information.

During the year 1963, the committee studied the case reports of 27 patients whose deaths were considered by the reporting physician to be connected with pregnancy or the childbearing state. Of these the committee ruled 25 were obstetrical deaths, 11 were avoidable and ten

were not avoidable. In four the committee was unable to determine whether or not the death was avoidable. Of the avoidable deaths, the committee was of the opinion that the attending physician should be assessed with the responsibility in three cases, the patient in four cases, the hospital in one case and combinations of factors in two cases. No assessment could be made in one case.

A report of the cases studied during the past five years is being prepared. The committee intends to offer for publication on a regular basis, selected anonymous case reports. The committee meets every two months, or more often if necessary. A plan for rotation of members of the committee is to be studied.

A proposal that the attendants who report the cases be invited to attend the meeting of the committee at which their case is to be discussed is being considered. The enactment in the last Legislature of the recodification of the Public Health Laws making information used in maternal mortality studies exempt as evidence in lawsuits should encourage meetings of this type.

SECTION VI

Mental Health Committee: The committee is very proud of the successful OSMA Conference on Mental Health, held January 26th, 1964, in Oklahoma City. The Conference drew over 100 physician participants.

The OSMA was well represented at the AMA's Tenth Annual Conference of State Mental Health Representatives, which met in Chicago February 14th-15th, 1964. George H. Guthrey, M.D., and Albert J. Glass, M.D., Director of the Oklahoma Department of Mental Health attended the Conference and reported the proceedings to the OSMA Committee on Mental Health.

The Mental Health Committee presents the following "New Action For Mental Health in Oklahoma" as its recommendation for established views on mental health by the OSMA. (Recommended "New Action For Mental Health in Oklahoma" follows.)

"New Action For Mental Health in Oklahoma"

The Committee on Mental Health has studied the appended documents of the American Medical Association which include "A Manual on Alcoholism," "Program of the Council on Mental Health," "Summary of the Program of the Council on Mental Health," "Principles on Mental Health," and our own Conference on Mental Health Proceedings from the special meeting of January 26th, 1964. On the basis of these materials, the Committee proposes that the Oklahoma State Medical Association endorse a vigorous program to improve the mental health of our State.

Such a program should include the following points:

Medical Participation and Control

Many of the recommendations hereafter recorded relate to the advisability of developing and establishing new and improved mental health programs, procedures, and facilities. Throughout it should be understood that the following principles prevail:

1. Maximal control at the local level;
2. Maximal supervision by physicians* of all clinical activities;
3. Maximal participation by the practicing physician in all recommended local programs;
4. Continuing close attention by state and local medical societies to these various problems and their solutions;
5. A mental health committee, with appropriate subcommittees dealing with specific problem areas, should be active in each medical society in the State of Oklahoma;
6. The State Director of Mental Health be an M.D. with training and experience in psychiatry.

Children

The relationship of maternal illness and childbirth procedures to perinatal infant distress and damage is highly significant. These factors contribute to neurologic deficit, retardation, and other subsequent mental, emotional and social problems.

*The term "physician" as used here and subsequently refers specifically to a doctor of medicine (M.D.).

This is an area where the physician can accomplish primary prevention: it deserves increased emphasis.

2. Existing well-baby and pediatric clinics offer an opportunity for early recognition of emotional as well as physical disturbances, with the possibility of instituting remedial and preventive measures.

3. The State Medical Association and its members should support the establishment of facilities for the emotionally disturbed child, such as day care centers, pre-natal and neonatal centers, and school counselling and guidance services, all adequately professionally staffed.

4. The vital role of the family doctor in the diagnosis and treatment of emotional disturbances in children must be emphasized.

5. The present foster home program of the State is inadequate for our present-day needs and should be reorganized.

6. Our present community and State hospital facilities are insufficient for the adequate outpatient or inpatient care of the emotionally disturbed adolescent and young child. Many of the emotional problems of the young child should be handled on either a day-care or outpatient basis, leaving the more severely disturbed children to be treated on a residential basis.

7. In collaboration with the school systems, attention and participation of the physicians should be focused on the "school drop-out" phenomenon and other school mental health problems. Special educational facilities are also needed to aid this group of children.

The Mentally Retarded

1. Mental retardation is often a symptom of a variety of other diseases, having in their etiology such factors as neurologic, biochemical, psychological, and socio-cultural deficiencies. At the present time our diagnostic, evaluation, treatment and habilitation facilities for both inpatients and outpatients are insufficient and inadequate.

2. There is a need for every practicing physician within the State of

Oklahoma to accept responsibility for the mentally retarded individuals who come under his care, in terms of recognition, evaluation and assistance in planning for their future.

3. With the opening of the Hissom Memorial Center, our ability to provide adequate treatment, educational and habilitation facilities for the retarded will be greatly improved. However, we still urgently need diagnostic and evaluative centers; we must develop more classrooms for the retarded and more teachers with training in special education; we must provide better care for the individual who is both retarded and emotionally disturbed.

Juvenile Delinquency

The physician can often detect early maladjustment problems during childhood and adolescence. A program should be established whereby physicians cooperate with schools and Juvenile Courts in diagnosis and treatment of the delinquent and the potential delinquent. This program should include not only the therapy and rehabilitation of the adolescent in trouble, but also should work toward the development of educational and recreational facilities to aid in the prevention of the problem.

The Family

The role of the family in the life of the mentally ill person is important. To help the family better to understand mental illness in one of its members, the physician should work with the family and also with various ancillary groups such as social workers, psychologists, community health nurses, and family and marriage counsellors.

The Aged

1. Physiological, emotional and socio-cultural problems combine to create special psychiatric disturbances in certain elderly people. New concepts, drugs, and treatment techniques now offer improved diagnostic approaches to these problems. Every effort should be made to see that these new developments are integrated into existing patient care programs as rapidly as possible, in order that our senior citizens may re-

ceive the benefits of proper treatment while remaining in their own communities.

2. Nursing homes are playing an increasingly important role in the care and treatment of elderly patients. The medical profession should take more responsibility for improving the quality of care rendered by these institutions.

Alcoholism

The Association should:

1. Recognize alcoholism as a medical problem and the chronic alcoholic as a sick person;

2. Endorse the existing AMA statement on diagnosis and treatment of alcoholism, as printed in its Manual on Alcoholism, 1962 (Pages 80-81), which reads:

(1) Alcoholic symptomatology and complications which occur in many personality disorders come within the scope of medical practice.

(2) Acute alcoholic intoxication can be and often is a medical emergency. As with any other acute case, the merits of each individual case should be considered at the time of the emergency.

(3) The type of alcoholic patient admitted to a general hospital should be judged on his individual merits, consideration being given to the attending physician's opinion, cooperation of the patient, and his behavior at the time of admission. The admitting doctors should then examine the patient and determine from the history and his actions whether he should be admitted or refused.

(4) In order to offer house officers well-rounded training in the general hospital, there should be adequate facilities available as part of a hospital program for care of alcoholics. Since the house officer in a hospital will eventually come in contact with this type of patient in practice, his training in treating this illness should come while he is a resident officer. Hospital staffs should be urged to ac-

cept these patients for treatment and cooperate in this program.

(5) With improved means of treatment available and the changed viewpoint and attitude which places the alcoholic in the category of a sick individual, most of the problems formerly encountered in the treatment of the alcoholic in a general hospital have been greatly reduced. In any event, the individual patient should be evaluated rather than have general objection on the grounds of a diagnosis of alcoholism.

It is recognized that no general policy can be made for all hospitals. Administrators are urged to give careful consideration to the possibility of accepting such patients in the light of the newer available measures and the need for providing facilities for treating these patients. In order to render a service to the community, provision should be made for such patients who cooperate and who wish such care.

In order to accomplish any degree of success with the problem of alcoholism, it is necessary that educational programs be enlarged, methods of case findings and follow-up be ascertained, research be encouraged, and general education toward acceptance of these sick people be emphasized. The hospital and its administration occupy a unique position in the community which allows them great opportunities to contribute to the accomplishment of this purpose. It is urged that general hospitals and their administrators and staffs give thought to meeting this responsibility.

3. Issue a statement recommending discontinuation of the existing legal ineligibility of alcoholics for admission to our State institutions.

4. Instruct an appropriate committee to consider and make prompt recommendations regarding topics to include the following:

A. Special education programs on alcoholism for physicians and other health personnel;

B. Insurance coverage for medical treatment of alcoholism and its complications.

Narcotic Addition

1. Narcotic addiction, a complex problem involving medical, pharmacological, psychiatric, and socio-cultural factors, requires special treatment including psychiatric care and rehabilitation.

2. Hospital treatment for the withdrawal and rehabilitation of these patients should be established.

3. The law should allow addicts the appropriate parole opportunities.

Sociopaths, Sex Psychopaths and Other Psychiatrically Deviated Offenders

It should be recognized that, even though imprisoned, the psychiatrically deviated offender needs appropriate treatment. This should be made available, not only for humanitarian reasons, but because the subsequent danger to society by such offenders can thereby be reduced.

Legal Problems

1. The Oklahoma State Medical Association should collaborate with the Oklahoma Bar Association to develop laws more realistically attuned to the needs and rights of the mentally ill.

2. Attention should be given to fostering voluntary commitments.

3. Pending court hearings, provision should be made for the temporary safekeeping of mentally ill patients in a suitable facility; jail is *not* considered a suitable place for retention of these persons. Necessary changes are required in commitment laws in order to provide for a more expeditious processing of commitment procedures.

4. The present law should be modified to permit the release by mental hospitals of appropriate information concerning a former patient to those agencies and individuals properly involved in the patient's after-care.

Hospital Programs

1. It is recommended that henceforth approximately 15 per cent of new general hospital beds be designed so that they would be suitable

for psychiatric patients as well as for general use. Given careful design, no elaborate security measures will be needed, and available data indicates that these beds will receive ample use in the local short-term care of the emotionally disturbed patient (with or without physical disease) in or near his own community.

2. Existing general hospitals throughout the State should make some provisions for the reception and treatment of the acutely ill psychiatric patient.

3. Comprehensive acute psychiatric treatment centers should be established in the more heavily populated areas of the state. These would provide emergency and walk-in service for all types of psychiatric cases, and intensive outpatient and inpatient treatment and care.

4. The establishment of rapid treatment centers would enable our large mental hospitals to operate more efficiently. This would result in the consolidation and improved treatment of the mentally ill at the community level, with a resultant decrease of admissions to state mental hospitals. Thus, state mental hospitals would be freed to improve and elaborate programs for the more severe mental disorders which require prolonged treatment and rehabilitation.

Rehabilitation and After-Care

The object of all mental health treatment programs is to enable the individual to function as independently and effectively as possible. Physical, mental and social rehabilitation are essential to this end. While hospitalized, the mentally ill should be given an opportunity, through vocational counselling and other training, to prepare themselves for the problems of everyday life after leaving the hospital. If this goal is to be reached, adequate programs of after-care must be provided for the released patient. This after-care program may include continuation of medical treatment, medical follow-up, supportive psychotherapy, continued vocational counselling, further rehabilitation or retraining proced-

ures as an outpatient. The family physician should be involved in this program of after-care. A local doctor of the patient's choice, working in close collaboration with the mental facility from which the patient comes, is in an ideal position to render effective after-care. The transition from hospital to community will be improved by special establishments, such as day-care centers, night hospitals, and half-way houses.

Education of the Physician in

Mental Health

1. The education of the physician in mental health should begin during the period of pre-medical and undergraduate education, which should include the behavioral sciences. The medical curriculum should give adequate emphasis to basic psychiatric principles and to the implications of interpersonal relationships in diagnostic and therapeutic procedures. Medical students should have clerkships providing experience with both inpatient and outpatient psychiatric patients of all ages.

2. Special courses in psychiatry should be developed for interns and residents training for work in fields other than psychiatry.

3. Continuing professional education should be available for the practicing physician to improve his knowledge and skill in dealing with the psychiatric aspects of medical practice. The University Medical Center should offer short courses and workshops leading to improved understanding of the physician-patient relationship and the psychological aspects of disease. Such courses should also help the practicing physician to improve his skills in diagnosis and treatment of common psychiatric disorders, increasing the percentage of cases he can manage locally, and clarifying the indications for referral.

Education of the Public

Greater public understanding of an information about mental illness which diminish the tendency to reject the mentally ill and will increase interest in programs intended to aid them. It is recommended that a Speakers' Bureau be established,

providing a constant source of professional people well-informed in various facets of mental health, to disseminate correct information to various civic and local groups. Mental health conferences and congresses for members of the medical profession, open to representatives of the various news media, and in certain situations, the public should be encouraged.

Personnel

1. The recruitment and retention of personnel properly trained in mental health disciplines is a national problem. Therefore it is difficult to attract competent outsiders to our state. Oklahoma must provide its own health personnel, and must also provide competitive salaries, a favorable working climate, and stable conditions of employment.

Accommodation should be made in the State Mental Health budget to provide for mental health training programs.

2. Educational programs should be planned to attract more high-school and college students to the health professions in general. Included should be a substantial presentation of the many opportunities for careers in the mental health field.

Research

Advances in caring for the mentally ill and promoting mental health will depend on increased knowledge and understanding arrived at through research. Insight into mental health and illness has progressed rapidly in the last ten years but is still at an early developmental state and must be fostered and expanded. Accommodation should be made in the State Mental Health budget to provide for mental health research programs. Once begun, these can often receive considerable additional financial support.

Financing

1. Improved facilities and increased operating funds are essential to overcome the many shortages and inadequacies existing in our present mental health program. Oklahoma provides less than half the money

(per patient per day) for mental patient care in state institutions than is currently budgeted in states like California and Kansas. Additional monies are needed to implement and extend present existing care and treatment programs in state mental hospitals.

2. Community mental health programs including clinics for mentally ill children and adults, special training schools for the mentally retarded; rapid treatment centers for heavily populated areas, half-way houses, after-care programs, research undertakings, and many other activities have been effectively and rapidly developed in many states under a method of joint local and state financing. Such a matching method should be developed for Oklahoma.

Report of the
COUNCIL ON PUBLIC POLICY
(APPROVED)

Rex E. Kenyon, M.D., Chairman
Paul B. Lingenfelter, M.D.
Vernon D. Cushing, M.D.
Thomas C. Points, M.D.
E. K. Norfleet, M.D.
Ed A. Brashear, M.D.
M. H. Newman, M.D.
Mark D. Holcomb, M.D.
R. Q. Goodwin, M.D.
John E. McDonald, M.D.
Worth M. Gross, M.D.
David Carson, M.D.
E. H. Shuller, M.D.
Louis H. Ritzhaupt, M.D.

During the past year, most activities were handled directly by the Council. However, special committees were created for special projects, as follows:

*Interprofessional Relations
Committee*

Orange M. Welborn, M.D., Chairman
Frank W. Clark, M.D.
Walter H. Dersch, Jr., M.D.
Francis R. First, M.D.
Fred W. Becker, M.D.
P. D. Casper, M.D.
Francis A. Davis, M.D.
Thomas C. Points, M.D.
Maxwell A. Johnson, M.D.

Medicine and Religion Committee

Allen E. Greer, M.D., Chairman
Marcus S. Barker, M.D.
Elvin M. Amen, M.D.
Reverend J. V. Porter
Reverend Robert Shaw
Reverend Patrick J. Quirk
E. C. Mohler, M.D.
E. N. Lubin, M.D.
L. J. Starry, M.D.
Rabbi Norbert L. Rosenthal
Reverend Finis Crutchfield
Reverend Clifford W. Farriester

Section I. Council Activities

The Council on Public Policy is pleased to report the following activities which were conducted directly by the Council:

A. County Officers Conference:
The second annual County Officers Conference was held in the Skirvin Hotel, Oklahoma City, on January 25th, 1964. This year, because of greater interest, the conference was not limited to officers of the various county societies, but all members of the state association, and their wives, were invited. Nearly two hundred physicians and wives attended.

The program included a discussion of the "Town and Gown Syndrome," legislative activities, operation hometown, state welfare programs, and AMPAC. In addition to member-speakers, the conference was highlighted by talks made by AMA Legislative Representative James Foristel, Washington, D.C.; Mr. Aubrey Gates, Director of the AMA's Field Service Division, Chicago, Illinois; the Honorable J. D. McCarty, Speaker of the Oklahoma House of Representatives; Mr. Ira McConnell of the Oklahoma Department of Public Welfare; Hoyt D. Gardner, M.D., Louisville, Kentucky, representing AMPAC; William R. DeMougeot, Ph.D., Director of Debate, North Texas State University, Denton; and U. S. Congressman Durward G. Hall, M.D., 5th Congressional District of Missouri.

B. King-Anderson Campaign:

1. "Operation Hometown." To implement the AMA's nationwide "Operation Hometown," statewide visits were made by representatives of this Council and members of the

staff of OSMA. "Operation Hometown" was explained to county medical society groups, and implementation urged. In general, response was good. "Operation Hometown" kits have been distributed to all county societies, and about 250,000 AMA pamphlets have been delivered by the OSMA.

An original project of OSMA, waiting room posters, entitled "What Does Medicare Offer You?," were prepared and distributed to every physician in the State of Oklahoma, and nearly 200,000 OSMA folders, "Take A Look At Medicare," have been distributed in connection with the poster. The Woman's Auxiliary was especially helpful in the distribution of this material, particularly in Tulsa and Oklahoma Counties; and this Council salutes the ladies for their active participation, which saved us both time and association money. Physicians were urged to supply a writing desk and materials so that patients could write their congressman while waiting to see the physician. The project was well received, and we are pleased to report that posters are in evidence in most waiting rooms throughout the state. This project drew a special letter of commendation from the American Medical Association.

2. *High School Debate Program:*
"Financing of medical care programs through the Social Security System" was the national high school debate question this year. This Council contacted debate coaches in every major high school in the state, offering debate kits and speakers to explain medicine's stand. Many requests were received in our state office, and they were filled as promptly as they were received. In addition, and through cooperation of the National Speakers Bureau of the AMA, this Council provided speakers for Central State College's annual High School Debate Conference held in Edmond, Oklahoma, on October 11th, 1964.

Jack Schreiber, M.D., Canfield, Ohio; William DeMougeot, Ph.D., Denton, Texas; and Mr. John P. Hanna, LL.B., Chicago, presented

convincing arguments to an assembly of 250 high school debaters. Our position was opposed by speakers from the AFL-CIO, Washington, D.C., and from the Department of Government, University of Oklahoma, Norman. On the following day, the negative debate teams (anti-medicare) won all debates.

3. *Congressional Contact Tour:* Last June, the Council sponsored and organized a very successful Congressional Contact Tour to Washington, D.C. Over twenty physicians and wives participated. A briefing session was held in Washington with AMA officials; U.S. Representatives were visited during the morning; a luncheon for the entire Congressional Delegation was conducted; and, our Senators were consulted individually in the afternoon.

This year's tour has been delayed, inasmuch as legislative indications in Washington were favorable. Realizing that "timing" was tremendously important in a project of this kind, several members of this Council and other physicians have been "on alert" to fly to Washington on short notice, should it appear that the House Ways and Means Committee might give favorable action to H.R. 3920. It has not been necessary, at the time of this writing to schedule the tour, but as the situation develops, it is quite likely that an OSMA group will again journey to Washington.

4. *Prognosis:* As of mid-April, no vote has been taken in the House Ways and Means Committee, although it appears that the legislation will be defeated by a sound majority. If this defeat is accomplished, the same can be attributed to conscientious effort on the part of this, and other, state associations toward educating the American public on the true facts of this politically-inspired, unnecessary, and tremendously expensive legislation. This Council congratulates and commends those members who have devoted time, money, and effort to the cause.

C. *Public Relations:*

1. *OSMA Health Column*—"A Message From Your Doctor": This col-

umn is appearing weekly in fifty daily and weekly newspapers throughout the state. Since its inception sixty-three weeks ago, this column has reached approximately 100,000 readers each week, and has dealt with many medical subjects of interest to the reader.

2. *Health Protection Week:* The week of April 12th-18th, 1964 was designated "Health Protection Week." This year, the project has been sponsored jointly by the OSMA Council on Public Health and the Oklahoma State Health Department. The use of Health Department funds relieved the OSMA of financial responsibility, so it was not necessary this year for the Council on Public Policy to jointly finance the project in cooperation with the Council on Public Health.

D. *Recommendations:* The significance of this type of work is obvious. While it appears that we have won a legislative battle, we cannot afford the luxury of "resting on our laurels." Toward the goal of preserving the freedom of Medicine, we must continue . . . indeed strengthen . . . our legislative efforts and public relations pursuits. We have come a long way, but the road ahead seems no shorter! We recommend, therefore, MORE OF THE SAME!

Section II. Medicine and Religion Committee

A. *General:* On the recommendation of President Duer, statewide implementation of the new AMA activity in the field of medicine and religion was launched in the Fall with the appointment of the OSMA Medicine and Religion Committee, chaired by Allen E. Green, M.D., Oklahoma City.

The general purpose of the committee is to create the proper climate for communication between the physician and the clergyman that will lead to the most effective care and treatment of the patient, recognizing that physical, spiritual, mental and social factors interdependently affect health.

As a first step in achieving better liaison, the state association committee was purposely comprised of

physicians and clergymen of various religious faiths and specialties. For initial objectives during its first year of operation, the committee selected (1) the establishment of interprofessional contact at the county level through the appointment of county medical society committees on Medicine and Religion (there are 21 committees in operation now); and (2) to conduct the statewide "Peter E. Russo Memorial Conference on Medicine and Religion" on May 3rd, in conjunction with the 58th Annual Meeting of the OSMA.

Your OSMA committee chairman appeared before the January 25th County Officers Conference of the OSMA, explained the project to county society leaders and asked for the appointment of local committees. Then, on March 13th the chairmen of county society committees were brought together for a briefing session, and handbooks for county society action were distributed.

The "Peter E. Russo Memorial Conference on Medicine and Religion" will be held during this annual meeting of the OSMA. Physicians, lay and professional church leaders, and the general public have been invited (a program is enclosed in the Delegates' portfolios).

B. *Recommendations:*

1. It is recommended that the Committee on Medicine and Religion be continued as a special committee of the association, and that the House of Delegates endorse the formation of counterpart committees in the county medical societies.

2. It is recommended that the OSMA Committee on Medicine and Religion be authorized to conduct another Peter E. Russo Memorial Conference on Medicine and Religion next year, if warranted by the reception of the May 3rd program, and/or to incorporate a special lecture on the subject into the Annual Meeting format for 1965.

Section III. Interprofessional Relations Committee

A. *Background:* During the past year, and since the appointment of this committee, an exhaustive study

has been made of the problems and issues of common interest shared by the medical profession and other professional groups. The interrelationship between medicine and the other major professional groups such as pharmacy, osteopathy, the legal profession, nursing, dentistry, the clergy and many other professional groups, has grown tremendously in the past few years. Problems common to the medical profession and each of the other major professions present themselves with ever increasing number and complexity. In Oklahoma, many of these problems have gone unresolved. In the past few years there has been increasing federal and state legislation to correct problems which could best be corrected by adequate liaison between the professions and by firm decisive action on the part of each of the professional groups.

The committee has found that the medical profession is deeply involved in problems common to other major professions, but the Oklahoma State Medical Association does not have an adequate program to study such problems on a continuing basis, to establish long range policy and goals, or to carry out adequate liaison with other professions in establishing effective programs of common interest.

B. Specific Studies and Needs: For the purpose of this study and this report, the committee confined its activity to a study of the relationship between the medical profession and pharmacy, osteopathy, the legal profession and nursing. These interprofessional relations areas were emphasized because they demonstrate urgent need for study, policy-making, and long-range planning. However, the overall problem of improved interprofessional relations is not confined to these areas.

1. *Pharmacy:* Your committee has found that problems common to the medical profession and pharmacy have greatly increased in the last few years. At the present time the

Oklahoma State Medical Association has no long-range policy concerning these problems, nor does it have an adequate mechanism for study of problems in this sphere of activity. Liaison with pharmaceutical groups is too informal and an active, continuous method of dealing with these problems is lacking.

The primary problems concerning pharmacy are:

a. Physician ownership in pharmacies or re-packaging houses or drug houses, either directly or indirectly.

b. Physician participation in proceeds from retail drug sales.

c. Interference in "free choice of pharmacy," or in "free choice of physician" by either a physician or pharmacist.

d. In addition, there are many minor and less pressing areas for joint approach to the problems of both professions, such as drug substitution, refills, over-the-counter prescribing of medication, breach of the doctor-patient relationship by a pharmacist, etc.

Because many of the above listed problems have been inadequately dealt with by joint actions between the professions, there is a wave of legislative action and investigation now taking place. Five states have now adopted legislative acts which prohibit a physician from ownership or control of any retail drug outlet or pharmacy. Legislation is due to be introduced in an additional sixteen states in the next few months. An intensive study is underway by a Senate Sub-Committee which is investigating the necessity for Federal Legislation in these fields.

It is your committee's feeling that the Oklahoma State Medical Association must establish a program whereby adequate and detailed study of problems common to the professions of medicine and pharmacy can be made, long-range policy and planning established, and adequate solution to these problems effected.

2. *Osteopathy:* The committee has studied the problems of the medical profession with regard to osteopathy, and has reviewed many of the mech-

anisms of other state medical associations for solving these problems. Without going into great detail, the committee has found an urgent need for the establishment of a suitable program by the Oklahoma State Medical Association. Such a program can be accomplished by adequate study, the establishment of long-range policy, and effecting a plan designed to serve the best interests of the medical profession and the public at large.

3. *The Legal Profession:* The committee has found numerous problems and fields of interests common to both the medical profession and legal profession which will require study, long-range policy, and a plan for implementation.

An excellent beginning to an interprofessional relations program has been made by the establishment of the Committee on Medical-Legal Relations. It is the feeling of the Interprofessional Relations Committee that the best interests of both the medical and legal professions would be served by incorporating the Medical-Legal Relations Committee into the overall program on interprofessional relations, and to expand its activity to include long-range study, planning, policy formulation and the implementation of necessary changes for the common benefit of these two professions and the public at large.

4. *Nursing:* The committee has found that problems of the nursing profession are innately and automatically of great concern to the medical profession. For the past several years, the Oklahoma State Medical Association has established liaison with the nursing profession, but activities of the OSMA committee have been limited by the lack of a long-range policy and plan, and by the lack of continuity of committee membership. The problems and common interests of both the medical profession and nursing are highly specialized, and require diligent long-range study by the medical profession as well as adequate liaison with the nursing profession. It is the feeling of this committee that an adequate program of interprofessional

relations should be established between the medical and nursing professions.

C. *Recommendations*: The Interprofessional Relations Committee respectfully submits that an urgent need exists to establish a broad program on *interprofessional relations* with other professions. Such a program should include the establishment of a *coordinated study* of the problems and common interests of the medical profession in relation to each other of the other major professions, and should include the establishment of *long-range policies and plans and an adequate mechanism for implementing* an effective program.

To implement such a program, it is suggested:

1. A new *Council on Interprofessional Relations* should be created to coordinate such a program, with committees established to study, recommend and deal with the relationship between the medical profession and each of the other pertinent professions.

In this respect, it is recommended that Chapter VIII, Section 1.00 of the OSMA Bylaws be amended by adding the words "Council on Interprofessional Relations" to the end of this section.

2. The present grievance system should be studied with the view of augmenting its capacity and authority to deal with the problems of discipline and regulation of our own profession in accordance with our professionally established code of ethics and policies.

3. Authority is requested to proceed in the establishment of an adequate program on interprofessional relations.

Acknowledgments

In preparing this Council report, the Chairman thanks those Council members who served willingly and cheerfully. I would further compliment Mr. Don Blair, Mr. Dwight Whelan and the Staff of the Oklahoma State Medical Association for their untiring efforts, for their advice and counsel, and for their originality. I would further thank each

individual member of this association who made any contribution, however small, toward the goal of legislative victory or improved public relations.

Report of the COUNCIL ON SOCIO-ECONOMIC ACTIVITIES

(APPROVED AS AMENDED)

Council Members

E. M. Gullatt, M.D., Chairman
E. H. Shuller, M.D.
B. C. Chatham, M.D.
Kenneth L. Wright, M.D.
C. Riley Strong, M.D.
A. K. Kent, M.D.
Stanley R. McCampbell, M.D.
George H. Garrison, M.D.
Wilkie D. Hoover, M.D.
John E. Highland, M.D.
Kieffer D. Davis, M.D.
Edwin A. McGrew, M.D.

The Council on Socio-Economic Activities is comprised of the following committees:

Public Welfare

E. M. Gullatt, M.D., Chairman
E. H. Shuller, M.D.
B. C. Chatham, M.D.
Stanley R. McCampbell, M.D.
George H. Garrison, M.D.

Prepaid Medical Care

Kenneth L. Wright, M.D., Chairman
J. B. Eskridge, III, M.D.
Crippled Children's Study Committee
C. Riley Strong, M.D., Chairman
G. R. Russell, M.D.
Thurman Shuller, M.D.

A. T. Baker, M.D.
Robert P. Holt, M.D.
James W. Kelley, M.D.
Edward W. Bank, Jr., M.D.

Medical-Legal Relations

M. O. Hart, M.D., Chairman
Cody Ray, M.D.
Robert O. Ryan, M.D.
William N. Harsha, M.D.
Carlton E. Smith, M.D.

SECTION I.

PUBLIC WELFARE COMMITTEE

A. Lack of Funds:

For at least two years, it has been known that the Department of Public Welfare cannot meet its financial obligations for the health care program under its direction and control. Your committee has labored conscientiously to stabilize the program, but

at this annual meeting can only report frustration—not any appreciable progress.

Despite growing utilization of the programs, rising costs of hospitalization, and greatly increased nursing home construction and use, the Oklahoma Legislature fixed the monthly premium per recipient at \$18.00 during the 1963 session. The monthly premium is allocated as follows: Physicians @ \$2.50; Hospitals @ \$6.25; Nursing Homes @ \$6.25; and Nursing Care in the Home @ \$3.00.

Moreover, all surplus funds of the Department have been diverted by legislative action to other purposes, including two scheduled raises in subsistence checks for welfare recipients (\$10.5 millions), the take-over of the state's institutions for the mentally retarded (\$11.5 millions), and the actual transfer of cash to the Department of Mental Health (\$2 millions).

B. Cutbacks in Payments:

The combination of increasing costs and stabilized premium income has resulted in sliding pay scales for physician and hospital services, but the benefits to recipients have not been materially curtailed.

Thus, since the House of Delegates met on May 3rd, 1963, there have been three cutbacks in the rates of pay for health services.

1. *June 1st, 1963*: Surgical fees were cut by 15 per cent, reducing them to 63.75 per cent of the Dependents Medical Care Fee Schedule. In-patient medical payments were reduced from \$5.00 per day for 15 days to \$5.00 per day for 10 days. The hospital pay period was reduced from 21 days to 14 days.

2. *November 1st, 1963*: Payments for in-patient medical care were further reduced to \$15.00 for the first day, and \$5.00 a day for the next four days. The compensable hospital pay period was cut from 14 days to 10 days (with an extension of 11 days possible on the recommendation of the hospital's utilization committee) and the rate of pay was reduced to 90 per cent of prime costs (excluding depreciation).

Payments to "vendors" will again be reduced. At the April 8th meeting of the DPW Professional Advisory Committee, we were advised that the program is about \$1 million underfunded for the fiscal year ending June 31st. The payment restrictions now in force are not producing sufficient savings to offset the existing deficit, and there is no place at the present time to turn for additional funds.

Thus physicians may expect another percentage reduction in the near future. (At this writing, the exact manner of meeting the latest financial emergency is not known, but a percentage reduction for all vendors is the most likely course of action. Further, the advisory committee has ruled that reductions are to be commensurate with the expenditure — premium ratio within each vendor category.)

C. Committee Efforts:

Your committee has made a concerted effort to restore the financial balance of the program, and thereby to enable physicians and hospitals to be fairly compensated for the services provided. Among the actions taken by the committee are the following:

1. *Conversion to Blue Cross-Blue Shield:* The Public Welfare Committee of the OSMA has recommended on several occasions that the DPW health care program be converted to Blue Cross-Blue Shield or to another competent prepaid health insurance carrier. These recommendations have not been favorably received by the Department of Public Welfare, which claims it can administer the program more economically. It appears most unlikely that cooperation can be obtained in the future, since the Department obviously wants to maintain direct administration of the program.

However, your committee has studied the Texas implementation of the Kerr-Mills Act, which is administered by Blue Cross-Blue Shield. For the first 15 days of hospital care, the Texas plan pays the hospital at

the rate of \$10.00 per day for bed and board, and separate payments are authorized for services and materials ordered by the physician and furnished while the patient is in the hospital. During the second 15-day period of a continuous hospital confinement, the plan pays the hospital one-half of the maximum charges it could have earned during the first 15 days.

On in-patient medical cases, the physician receives \$3.00 a day for the first 15-day period, and \$1.50 a day for the next 15 days. Surgeons are paid according to a fee schedule which contains a \$200.00 maximum.

According to the Texas Medical Association, the program is paying about 80 per cent of the total hospital bill, and about 55 per cent of the usual and customary physicians' fees. The premium is \$8.68 a month per insured, which is comparable to the \$8.75 budgeted premium in Oklahoma for medical and hospital care.

Texas' Blue Cross-Blue Shield administers the program for less than three per cent of the total premium income, and Oklahoma Blue Cross-Blue Shield has indicated that it can do as well.

2. *Education and Utilization Control:* Since physicians bear the brunt of responsibility for controlling utilization, your committee volunteered to visit 25 of the state's general hospitals which showed DPW occupancy rates of over 50 per cent. Our participation in this activity was approved by the House of Delegates on May 3rd, 1963.

In general, our visitation program to these hospitals revealed unsatisfactory medical records on the welfare patients. In many cases, the diagnosis could not be substantiated because of the absence of a recorded history and physical, and the paucity of any laboratory reports.

Representatives of your committee attempted to correct situations where they existed by emphasizing the necessity of adequate records, and by explaining the regulations and philosophy governing the DPW program. Reports were filed with the department of Public Welfare, and follow-

up audits were suggested in some cases. To our knowledge, the Department has not re-checked according to our recommendations, but it is known that record keeping has improved in some of the hospitals as a result of our educational efforts with members of hospital staffs and administrators.

During the past year, the Department brought to our attention that some physicians were billing the program for visits to nursing homes that were not performed, and that other violations of the rules were being noticed. A special letter to the membership warned against fraudulent claims, and urged physicians to prevent errors in billing through closer attention to office procedure. In addition, the Department was invited to furnish documentation of all such irregularities, and they were, in turn, transmitted to the OSMA Grievance Committee for investigation.

The Grievance Committee corresponded and/or personally visited with sixteen physicians in regard to these cases. Six of the cases involved direct billing of the welfare recipient for the balance of an amount exceeding the DPW payment. Simple clerical errors comprised seven of the cases, these involving the posting of incorrect dates for visits to nursing home patients. In three cases, there was evidence of gross errors of incorrect billing for nursing home visits and action was taken by the Grievance Committee.

The Grievance Committee is to be commended for its prompt handling of all cases referred by the Department during the past year. Physicians involved in the settlement of disputed claims were generally cooperative, and the Department of Public Welfare has been kept fully informed as to the disposition of each case.

(Hospitalizing patients for the purpose of making a diagnosis is apparently a common infraction of the regulations, deserving of our attention in the future.)

3. *Recommendations For Economy*: On September 15th, 1963, the OSMA Committee met with representatives of the Oklahoma Hospital Association, Oklahoma Osteopathic Association and the Oklahoma Osteopathic Hospital Association. The purpose of the meeting was to draft recommendations, which could be supported collectively, to bring the DPW program into financial balance as expeditiously as possible. In addition to recommending the continuation of educational activities designed to slow down rising utilization, it was agreed to urge hospital medical staffs to form utilization committees, to review welfare admissions periodically. Several temporary recommendations designed to bring expenditures within the budget were proposed by the joint group, as follows: (a) Payments for in-patient medical care would be changed from \$5.00/day for ten days (maximum fee of \$50.00) to \$15.00 for the first day and \$5.00 a day for the next four days (\$35.00 maximum); (b) No additional in-patient medical fees would be paid to a physician for re-admitting the same patient to the hospital within a period of 90 days; (c) Compensable hospital days would be reduced from 14 days to 10 days, with an 11-day extension made possible upon recommendation of the attending physician; (d) Hospital care would be limited to 30 days per recipient during the calendar year, subject to adjustment upon the recommendation of the hospital utilization committee; (e) Payments to hospitals would be cut to 90 per cent of prime cost, or 90 per cent of the established ceiling, whichever is the lesser; (f) Out-patient visits to nursing home patients and patients in their own homes would be limited to one compensable visit per month; (g) Welfare recipients would have \$1.50/day deducted from their subsistence checks during periods of hospitalization.

The recommendations were presented to the Professional Advisory Committee to the Department of Public Welfare, and were accepted with the following exceptions and modi-

fications: (a) Extension of hospitalization periods beyond the first ten days would require authorization from the hospital utilization committee; (b) A decision was deferred on the proposal to limit hospital days to 30 per year; (c) The Department opposed limiting professional visits to nursing home patients to one-a-month, on the grounds it would only save \$300,000 a year, a sum which was considered to be insignificant; (d) Deducting \$1.50 per day from subsistence checks was opposed by the Department on the grounds that it would be impractical and unlawful.

The OSMA Public Welfare Committee filed a written objection to the Department in regard to turning down the recommended restrictions which would have provided incentives to the welfare recipients to conserve medical and hospital benefits.

On February 27th, 1964, the OSMA Executive Secretary wrote to the Director of the Department of Public Welfare on behalf of the committee. This letter reiterated the association's desire to incorporate into the program a deterrent against over-utilization, along one or more of the following lines: (a) Place a ceiling on the number of days hospitalization to be offered during a calendar year; (b) Incorporate a \$25.00 deductible into the program, but provide that the advance payment of the deductible would not be a condition of hospital admission; (c) Establish the program on a co-insurance principle, whereby physicians could bill the patient directly for the difference between the Welfare Department's payment and the fee schedule which is recognized by the Department to be fair and reasonable (or, the physician could at least reserve the right to waive all or part of the fee to which he is entitled).

The letter was referred to Thomas B. McKneely, M.D., Chief, Division of Medical Care Standards, Bureau of Family Services, Department of Health, Education and Welfare. Doctor McKneely informed Oklahoma's Director of Public Welfare that the

recommendations contained in the letter would be incompatible with Federal regulations.

Your committee is informed that neither of the two Federal laws governing the Oklahoma program (P.L. 84-880 and P.L. 86-778) require that the government payment for services be accepted as payment in full. However, the Department of Health, Education and Welfare has developed administrative regulations to this effect.

D. *General Observations*:

In dealing with the Department of Public Welfare health care program and related problems, your committee has been thwarted in many of its attempts to bring about general stability and to achieve a reasonable rate of pay for the medical and hospital services rendered to recipients. The program is exceedingly complex in its financial structure; it is subject to myriad governmental regulations; the actions of the Oklahoma State Legislature have direct bearing on the amount of funds available; there are political considerations and overtones which retard any curtailment of benefits to pensioners; and vendor organizations sometimes differ as to the proper course to take in meeting current dilemmas and/or emergency situations; the Department expects to prescribe the benefits for which it pays; and the desires of recipients are an important factor.

Thus, decisions are often compromised, with or without the approval of OSMA committee members, and liaison with OSMA members is difficult to sustain in view of the fluid situation which exists.

We are aware that the Department of Public Welfare itself must shoulder much of the responsibility for the present financial crisis affecting the health care program. While it is true that the Legislature has the perfect right to transfer new financial responsibilities to the Department and thus jeopardize the solvency of existing programs, it must be recognized that the Department is a powerful arm of state government, which

is frequently in consultation and often in harmony with legislative leaders prior to the passage of related legislation.

Whatever may have happened in the past, however, the fact remains that present funds are insufficient to meet the demands of the health care program. The natural growth in state sales tax may offer some relief to the doctors and hospitals (and to the hospitals' private patients) who are underwriting so much of the cost. Moreover, proposed Federal legislation designed to raise the minimum social security monthly benefit may free state funds to bolster the health care program.

But simply providing more money does not alter the problem of growing utilization, nor will it diminish the need to stabilize the program's costs and benefits.

The Director of the Department reports that expenditures have exceeded the budgeted premium consistently since June, 1961, and the physicians of Oklahoma cannot but share responsibility for growing utilization. We can complain about the design of the program and do whatever we can to improve it, but the fact remains that we are singularly impowered to admit and discharge patients in accordance with our professional judgment.

More than any other factor, utilization influences overall costs. The June 1st and November 1st cutbacks in payments to vendors did not materially improve utilization, and costs continued to exceed the budgeted premium.

On March 15th, 1964, the Director of the Department of Public Welfare informed your committee that the following alternatives (or combinations) should be considered in regard to curtailing expenditures:

1. Maintain the status quo, but payments to physicians and hospitals will be prorated according to the amount of money available.

2. Re-define the "Life-In-Danger" admission policy to specifically ex-

clude certain medical and surgical diagnoses.

3. Abandon the insurance principle of the program (whereby physicians control hospital admission and a monthly premium is set aside to cover the costs) in favor of a pre-authorization principle. Under the suggested change in principle, a physician would have to receive DPW authorization for admission of all patients, except under emergency conditions.

Your committee did not reach a unified agreement on these alternatives at its March 15th meeting, and an "unofficial" report to the OSMA Board of Trustees on March 22nd, 1964, was tabled.

E. Recommendations:

1. As an over-riding recommendation to all others, the Public Welfare Committee of the Oklahoma State Medical Association believes the health care program could best be stabilized by converting it to a system of prepaid health insurance, using Blue Cross-Blue Shield or another competent carrier as the fiscal administrator. The dignity of recipients, as policyholders, would also be enhanced.

2. The committee officially disapproved any further subsidization of the program on the part of physicians and hospitals, but if such payments are to be brought about on an involuntary basis, they should be equally applicable to all health care vendors, and the percentage figure for reduced payments should be computed on a monthly basis by the Department of Public Welfare.

3. The "Life-In-Danger" admission policy should be re-defined, to specifically exclude certain medical and surgical procedures. (A special committee will be necessary to develop this change in detail.)

4. The "Insurance Principle" is reaffirmed, whereby physicians may use their individual professional judgment admitting and discharging patients.

5. Hospitals should be paid a basic bed and board rate, and charges for ancillary services should be itemized on the claim form, by individual

case, and paid according to a fee schedule. (A special committee will be necessary to develop this change in detail.)

6. The premium for nursing home care should be removed completely from the health care premium.

SECTION II.

CRIPPLED CHILDREN'S STUDY COMMITTEE

A. Background:

On May 3rd, 1963, the House of Delegates passed a resolution (No. 11) which stated, in part: "The Oklahoma State Medical Association go on record as being not opposed to accepting pay for hospitalization of patients under the Crippled Children's Act."

The president of the OSMA wrote to the Chairman of the Public Welfare Commission, Mr. Rupert Jones, on August 19th, 1963, in which he transmitted the request for payment. Under the Oklahoma Statutes, the commission has authority to provide for "... payment for physicians' and dentists' services if payment is recommended by the Council (Board of Trustees) of the Oklahoma State Medical Association or the Executive Council of the Oklahoma Dental Association."

Mr. Jones referred the letter to the Chairman of the DPW Professional Advisory Committee on Medical Care for Crippled Children, Don H. O'Donoghue, M.D.

On November 8th, 1963, the Executive Secretary of the OSMA was invited to meet with Doctor O'Donoghue's committee, at which time he learned that funds were insufficient to pay for physicians' services without curtailing other aspects of the program. The advisory committee recommended that the OSMA appoint a committee for the purpose of studying the financial situation of the Crippled Children's program, and that no change be made in the program until a study had been completed and the findings considered by the various committees involved. OSMA President Duer was notified officially of this action on November 23rd, 1963.

The OSMA Crippled Children's Study Committee was created by the OSMA president on December 12th, 1963, and a letter was written to the Director of the Department of Public Welfare on December 18th advising him of the committee's availability for a joint meeting.

The OSMA committee was invited to meet jointly with the Advisory Committee on April 2nd, 1964.

B. Findings:

Your committee learned on April 2nd that the Department of Public Welfare is now over-expending approximately \$650,000 a month in its overall operations, which includes financial responsibility for the Crippled Children's program.

According to the calculations of the Department's staff, it will take about \$500,000 a year to pay for surgical services to crippled children, and about \$422,000 a year to pay for medical services.

The Department of Public Welfare is now drawing the maximum Federal matching funds (\$350,000 a year) for Crippled Children's care, so it will require additional state government appropriations to pay physicians for their services, or else present benefits will have to be cut by approximately \$1,000,000 to accommodate physicians' fees.

It is not anticipated that there will be any surplus sales tax funds (the principal source of revenue for all DPW programs) when the legislature meets in January, 1965.

Therefore, the Director of the Department of Public Welfare proposed the following alternatives:

1. The legislature could repeal the \$2,000,000 allocation of DPW funds now going to the Department of Mental Health, thus freeing sufficient sales tax funds to pay physicians for crippled children's work.

2. The passage of a proposed Federal bill to raise the minimum monthly check for social security beneficiaries would free state funds on persons who are receiving combination payments from both O.A.S.I. and the Department of Public Welfare.

3. The legislature could increase the state sales tax.

4. Growth in sales tax collections may provide sufficient funds for future payment of physicians.

The Director of DPW said it was most likely that a request to the appropriate committees of the Legislative Council next Fall would result in legislative approval of the Public Welfare Commission paying for physicians' services in 1965.

However, he suggested that the language of the 1963 OSMA resolution could be more positively phrased, to the extent that the OSMA *avored* payment rather than "being not opposed to accepting pay . . ."

As to the course of procedure to obtain the necessary funds, the Director outlined the following steps:

1. A positive request from the Board of Trustees of the OSMA would be presented to the Professional Advisory Committee on Medical Care for Crippled Children.

2. With the approval of the advisory committee, a formal recommendation would be made by the Department of Public Welfare to the Public Welfare Commission.

3. With the commission's approval, the Director of the DPW and representatives of the OSMA would go to the appropriate committees of the Legislative Council in the Fall and formally request additional funds with which to pay physicians.

4. Approval by the Legislative Council is tantamount to authorization for increased funds.

C. Recommendations:

In view of the fact that the 1963 OSMA House of Delegates expressed its intent to authorize payment of physicians for crippled children's care, your committee makes the following recommendations:

1. That the OSMA Board of Trustees and the House of Delegates, by their approval of this report on April 30th, 1964, and May 2nd, 1964, respectively, herewith authorize and formally request that physicians be compensated for their professional services in connection with the Crippled Children's Act.

2. That the OSMA Crippled Children's Study Committee be continued as a special committee of the association, and that it be authorized to follow the steps outlined by the Director of the Department of Public Welfare to achieve the necessary state appropriation with which to pay physicians.

SECTION III.

OCCUPATIONAL HEALTH COMMITTEE

A. Need For Committee:

The Occupational Health Committee of the OSMA has not been active for the past two years, and it appears to merit reactivation, particularly since the Legislative Council of the Oklahoma State Legislature is now contemplating a fee schedule for physicians' services under Workmen's Compensation.

B. Recommendations:

1. It is recommended that the committee be reactivated, under the chairmanship of Kieffer Davis, M.D., Bartlesville, but that the chairman of this committee should not be a permanent office; that the President should have the prerogative of choosing his committee members.

SECTION IV.

PREPAID MEDICAL CARE COMMITTEE

A. Report:

Due to the press of other business affecting the Council on Socio-Economic Activities and the OSMA staff, the work of the Prepaid Medical Care Committee was not given emphasis during the past organizational year.

B. Recommendations:

1. That the committee be reactivated at full strength to enable it to pursue the many projects and problems associated with this subject area.

SECTION V.

AREAWIDE HOSPITAL PLANNING Council Action

A. Background:

At the 1963 annual meeting of the House of Delegates, Resolution No. 7 opposed areawide hospital planning

as promoted by the American Hospital Association and the U.S. Public Health Service. Further, the OSMA was asked to study the subject of areawide hospital planning with certain objectives in mind, including the following:

1. To limit each such area to regions within the state as is commensurate with the problem involved.

2. To alert county medical societies to fight enabling legislation which would convert this from a voluntary to a compulsory system.

3. To make sure that professional representation is present in each such agency.

4. To view certain aspects of area-wide planning as encroachments upon the private practice of medicine in hospitals.

5. To keep in mind that the patient has a right to receive adequate care in his own community, rather than being compelled to drive considerable distances.

The Council on Socio-Economic Activities obtained copies of the U.S. Public Health Service-American Hospital Association report on "Area-wide Planning For Hospitals and Related Health Facilities," and generally agreed that the plan called for excessive regimentation. However, a meeting was called to discuss the report with the Commissioner of Health, Doctor Kirk T. Mosley, who controls the allocation of Hill-Burton Hospital Construction Funds in Oklahoma.

Prior to the meeting, Doctor Mosley informed us that he preferred a voluntary plan being sponsored by the Oklahoma Hospital Association. The hospital association was contacted by the OSMA Council, and on March 15th, 1964, a meeting was held with Doctor Mosley and Mr. James Harvey, President of the Oklahoma Hospital Association.

Mr. Harvey explained his association's project, as follows:

1. The name of the proposed organization will be "Oklahoma Health

Facilities Informational Service," which will be established as a non-profit corporation.

2. The purpose will be to identify selected data that is essential to improving the existing methods of planning for hospitals and related institutions. Once the data is collected and analyzed, the statewide organization will encourage all communities in the state, which are planning either expanded facilities or new construction, to first form a local hospital planning council. The local council should include persons generally representative of the community, including medical profession and hospital representation. The "Oklahoma Health Facilities Information Service" will provide staff assistance for the local council and furnish all necessary data. The staff will assist in writing the local council's report to the community, except that portion of the report which contains recommendations.

3. The "Oklahoma Health Facilities Informational Service" will be initially financed by a "seed grant" from the National Institute of Health, and thereafter by the contributions of such organizations as the Oklahoma Hospital Association, the Blue Cross Plan, insurance companies, and other agencies, organizations and foundations interested in the subject area.

4. While there will be no official connection, it is contemplated that the state's Hill-Burton authority will be guided by the recommendations of local planning councils in making allocation of construction funds.

5. The governing board of the "Oklahoma Health Facilities Informational Service" will be comprised of representatives of hospitals, the medical profession, and various segments of the public.

6. The entire project is designed to utilize a voluntary approach to intelligent planning of hospitals and related health facilities, and to forestall legislative enforcement.

B. Recommendations:

1. The Council on Socio-Economic Activities goes on record as approv-

ing a VOLUNTARY group for studying and accumulating statistics on health facilities in the state, with the cooperation of the Oklahoma State Medical Association, the Oklahoma Hospital Association, Oklahoma Osteopathic Association, and three other members at large to be chosen by the three aforementioned groups; and that it be agreed to by these groups, and that these representatives of the OSMA be appointed by the President of the association.

SECTION VI.

NOMINATIONS TO BLUE CROSS-BLUE SHIELD BOARDS

A. Blue Cross:

For three positions on the Blue Cross Board, your Council nominated the following physicians:

1. Ben H. Nicholson, M.D., Oklahoma City (incumbent)
2. Rex E. Kenyon, M.D., Oklahoma City
3. James W. Kelley, M.D., Tulsa (incumbent)
4. John E. Highland, M.D., Miami (incumbent)

B. Blue Shield:

For three positions on the Blue Shield Board, your Council nominated the following physicians:

1. John F. Burton, M.D., Oklahoma City (incumbent)
2. Martin H. Andrews, M.D., Oklahoma City
3. Homer A. Ruprecht, M.D., Tulsa (incumbent)
4. Maurice C. Gephardt, M.D., Muskogee
5. Bruce R. Hinson, M.D., Enid (incumbent)
6. David Fried, M.D. Hollis

Report of the GRIEVANCE COMMITTEE

(APPROVED)

Committee Members

E. C. Mohler, M.D., Chairman
J. Hoyle Carlock, M.D.
Clinton Gallaher, M.D.
Walter E. Brown, M.D.
Alfred T. Baker, M.D.

During the past organizational year, the committee has received cases from two basic sources.

First, cases involving 16 OSMA members were referred to the Griev-

ance Committee by the OSMA Public Welfare Committee. Six of these cases involved direct billing of the welfare recipient for the balance of an amount exceeding the payment schedule of the Department of Public Welfare. Simple clerical errors comprised seven of the cases, these involving the posting of incorrect dates for visits to nursing home patients. In three cases, there was evidence of gross errors of incorrect billing for nursing home visits.

Your committee corrected most of the situations by bringing to the attention of the physicians involved the correct rules, regulations and philosophy governing the welfare medical care programs. The committee was of the opinion that the complex program of the Department of Public Welfare invited inadvertent violations of the regulations, and it made recommendations back to the OSMA Public Welfare Committee calling for simplification of the policies and a better educational effort on the part of the Department of Public Welfare.

Physicians guilty of minor clerical errors were simply admonished to pay more personal attention to their office routines and billing procedures. It was the committee's feeling regarding this category of complaint, that such minor errors should be handled administratively by the Department of Public Welfare.

In the three cases of gross errors in billing, the committee was more stern with the physicians involved, suggesting that the physicians make corrected billings and provide restitution for any funds received for services not performed.

The physicians in this category were generally cooperative, and to the best of our knowledge, the Department of Public Welfare is satisfied with our handling of these cases. Some of the physicians, however, were understandably perturbed that they were referred directly to the Grievance Committee for minor misunderstandings or infractions without having first been contacted by the Department of Public Welfare.

The second basic source of complaints was our usual source of the

patients themselves. Twelve cases were received.

Of these, six involved charges, two were on the basis of the medical treatment received, two related to unethical conduct, and two were without any foundation.

Recommendations

The present rather loose-knit grievance committee system works well when the physician is cooperative and shares the goal of the committee members to improve patient-physician relations.

However, occasionally your committee is frustrated by the attitude of certain OSMA members, who are not only personally oblivious to public reaction, but are also inclined to ignore the committee's efforts toward mutual cooperation.

When such a situation arises, we find little comfort in the Bylaws of the OSMA, which should be more specific as to alternate courses of procedure to be followed. It is tempting to overlook the shortcomings of the relatively few members of our association who hold themselves above constructive criticism, particularly when the committee has no stronger direction than that presently contained in the Bylaws. Moreover, it is a rare county medical society which will act with decisiveness as the occasion may demand.

Throughout organized medicine, we take pride in our unique right to govern ourselves, yet we are inviting government intervention by the general failure to maintain optimum standards of conduct.

Your committee sincerely believes that most physicians conduct their practices with honor and integrity, but it is the few who will blacken the image of the group and who must be dealt with internally if we are to protect ourselves from external forces and maintain an important vestige of our freedom. More importantly, we have an obligation to the public.

Therefore, your committee recommends that the Constitution and Bylaws Committee of the Oklahoma State Medical Association make an extensive study of grievance and

disciplinary methodology, with a view toward improving that section of our Bylaws pertaining to the operation of the OSMA Grievance Committee and its county society counterparts.

RESOLUTIONS

Resolution No. 1.

(APPROVED)

INTRODUCED BY: OSMA Editorial Board

SUBJECT: Journal Advertising

REFERRED TO: Reference Committee I

WHEREAS, the 56-year-old *Journal of the Oklahoma State Medical Association* provides nearly 2,000 physicians with a medium of exchange for scientific and other information; and

WHEREAS, for many members of the Oklahoma State Medical Association, the *Journal* is the only medical publication readily available for the written expression of ideas; and

WHEREAS, the *Journal* enjoys excellent readership and the general support of the profession; and

WHEREAS, the *Journal* has been honored on two occasions in recent years for its editorial and typographical excellence; and

WHEREAS, the continued life of the *Journal* is now being threatened by a steady decline in pharmaceutical advertising, reported to be the result of a shift by major manufacturers to the support of certain commercial publications; and

WHEREAS, the imminent demise of the *Journal of the Oklahoma State Medical Association* will not only destroy the free exchange of scientific and organizational information of vital interest to the medical profession in Oklahoma, but will also seriously affect the efficiency of the association in achieving its objectives, most of which are objectives commonly shared with the pharmaceutical industry; and

WHEREAS, publications of other state medical associations are reported to be in similar financial circumstances;

NOW, THEREFORE BE IT RESOLVED, by the Editorial Board and the House of Delegates of the Okla-

homa State Medical Association, that the excessive diversion of pharmaceutical advertising to commercial publications and the resultant financial insolvency of state medical association publications are to be deplored as contrary to the interests of medical science, medical organizations and the companion pharmaceutical industry; and

BE IT FURTHER RESOLVED, that manufacturers whose products are supported by the faith of practicing physicians should return the faith by immediately restoring support to the locally-controlled, valuable publications of organized medicine; and

BE IT FURTHER RESOLVED, that the House of Delegates shall require the Editorial Board of the *Journal of the Oklahoma State Medical Association* to annually report the names of the pharmaceutical manufacturers who support the publication of our non-profit *Journal*, as well as the individual amounts of such support; and

BE IT FURTHER RESOLVED, that major pharmaceutical manufacturers be supplied with copies of this resolution and be respectfully advised to reconsider advertising policies which might work against the continued life of a major, important medium of medical communications.

Resolution No. 2.

(APPROVED AS AMENDED)

INTRODUCED BY: Canadian County Medical Society

SUBJECT: Statement of Principle, Indigent Medical Care Programs
REFERRED TO: Reference Committee III

WHEREAS, the members of the Canadian County Medical Society believe that the trend of the Federal Government toward socialism is increasing, as evidenced, among other things, by the program promulgated by the Department of Health, Education and Welfare and the Kerr-Mills law with respect to socialized medicine and medical care; and

WHEREAS, the efforts to reverse this trend by the formation of organizations to educate the American taxpayers of the cost to them and the dangers thereof have been inadequate and ineffective, and this society believes it is necessary that the members of the medical profession take positive action to combat said socialistic trend, and to preserve our free enterprise economy and to protect and perpetuate the confidential doctor-patient relationship;

NOW, THEREFORE BE IT RESOLVED, that the members of this Association shall always under the oaths, ethics or principles of the medical profession render services to the indigent free of charge.

Resolution No. 3.

(APPROVED)

INTRODUCED BY: Choctaw-Pushmataha County Medical Society

SUBJECT: General Practice Teaching Program

REFERRED TO: Reference Committee I

WHEREAS, practicing physicians are necessarily concerned with the instruction and education of doctors of the state; and

WHEREAS, the responsibility for the maintenance of the best professional relationship between academic and practicing physicians is recognized;

THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association recommends the appointment of a general practitioner as a part-time instructor for the first-year medical school students on a rotating basis.

BE IT FURTHER RESOLVED, that a committee of general practitioners be selected by the Dean of the medical school, after counsel with the President of the Oklahoma State Medical Association, the President of the Oklahoma Academy of General Practice, and the State Commissioner of Health, to implement this teaching program.

BE IT FURTHER RESOLVED, that for continuity of teaching in this program, other committee members be selected at the discretion of the Dean of the medical school.

Resolution No. 4.

(APPROVED)

INTRODUCED BY: Tulsa County Medical Society

SUBJECT: Dual Memberships in County Medical Societies

REFERRED TO: Reference Committee I

WHEREAS, the Constitution and Bylaws of the Oklahoma State Medical Association neither specifically permits nor prohibits a physician from holding membership in two or more component county medical societies at the same time; and

WHEREAS, the existence of dual memberships has posed unresolved problems pertaining to administration, primary responsibilities and authorities, discipline and interpretation;

NOW, THEREFORE BE IT RESOLVED, that the House of Delegates direct the Committee on Constitution and Bylaws to prepare and submit to the House at its next regular session an appropriate amendment or amendments which shall establish a specific policy and guidelines relative to dual memberships in component county societies.

Resolution No. 5.

(APPROVED) Ruled same in intent as Resolution No. 29.

INTRODUCED BY: Tulsa County Medical Society

SUBJECT: Immunization Education Program

REFERRED TO: Reference Committee II

WHEREAS, the House of Delegates has previously adopted, for good and sufficient reason, resolutions instructing the Oklahoma State Medical Association to develop an effective program of public education concerning immunizations available against preventable disease, in cooperation with all other interested parties, specifically to the Oklahoma State Department of Public Health and the Pharmaceutical Industry; and

WHEREAS, the need for this program continues to be apparent despite widespread programs of public education;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association, through appropriate councils and committees, be instructed to continue and enlarge and intensify a continuing public education program throughout the year against preventable illness, and to initiate new and continuing programs in cooperation with any reputable agency or private concern offering assistance and cooperation.

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association sponsor appropriate legislation in the Oklahoma State Legislature, to provide funds for the administration of an adequate immunization education program.

BE IT FURTHER RESOLVED, that this program be developed and administered in keeping with the principle that immunization shall be the individual financial responsibility of the citizen and that arrangements continue to be made available for the care of those without means.

Resolution No. 6.

(APPROVED AS AMENDED) Ruled same in intent as Resolution No. 30.

INTRODUCED BY: Tulsa County Medical Society

SUBJECT: Immunization by Public Health Departments

REFERRED TO: Reference Committee II

WHEREAS, the interpretation of the Attorney General of the State of Oklahoma, of the law setting up the Oklahoma State Department of Public Health, is that its services are available to all citizens regardless of ability to pay; and

WHEREAS, the Oklahoma State Department of Public Health in an appropriate function, sponsors clinics for immunizations against preventable illnesses, regardless of ability of recipients to pay; and

WHEREAS, it represents an avoidable expense to the taxpayers to pay for immunization of individuals with means where this is readily locally available through non-public sources;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State

Medical Association through appropriate executive action, requests the Oklahoma State Department of Public Health to avoid duplication of facilities for immunizations, when the local ability to provide this service is available.

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association through appropriate council or committee, urges the Oklahoma State Department of Public Health to provide immunizations to the qualified needy only.

Resolution No. 7.

(APPROVED)

INTRODUCED BY: Council on Public Health

SUBJECT: Endorsement of AMA Mental Health Program

REFERRED TO: Reference Committee IV

WHEREAS, the American Medical Association has officially recognized mental illness as "a major health problem facing the nation today," further stating that "the medical profession has a clear responsibility to assume leadership in the mental health field and to work with professional and lay groups in a sustained, coordinated effort to effect sound, workable mental health programs"; and

WHEREAS, the American Medical Association has further stated that it "recognizes the important stake every physician, regardless of type of practice, has in improving our mental health knowledge and resources"; and

WHEREAS, the policies, objectives and recommendations of the American Medical Association concerning mental health are available in official document,¹ which have been studied by the Oklahoma State Medical Association's Committee on Mental Health; and

WHEREAS, on January 26th, 1964, the Oklahoma State Medical Association sponsored a special Conference on Mental Health, which provided additional details concerning the application of these policies and objec-

tives to the mental health problems of Oklahoma;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association endorses the principles and policies concerning mental health as officially put forward by the American Medical Association in the above mentioned documents.¹

Resolution No. 8.

(DISAPPROVED)

INTRODUCED BY: J. L. Richardson, M.D., Secretary, Oklahoma Orthopedic Society

SUBJECT: Better Care For Crippled Children.

REFERRED TO: Reference Committee II

WHEREAS, due to lack of adequate hospital facilities and services in certain areas of the state, orthopedic care of Crippled Children's cases is not always of the highest attainable quality; and

WHEREAS, training hospitals approved by the national accrediting agency of the American College of Surgeons are well-equipped for such specialized care; and

WHEREAS, the Oklahoma Orthopedic Society has seriously considered problems associated with the Crippled Children's program in Oklahoma, and unanimously supports the content of this resolution;

NOW, THEREFORE, BE IT RESOLVED, that all elective and reconstructive surgery for Crippled Children's cases be performed at the University of Oklahoma Medical Center.

Resolution No. 9.

(APPROVED)

INTRODUCED BY: J. L. Richardson, M.D., Secretary, Oklahoma Orthopedic Society

SUBJECT: Fee For Service, Crippled Children's Program

REFERRED TO: Reference Committee II

1. AMA Statement of Principles on Mental Health
Program of the Council on Mental Health
Summary of the Program of the Council of Mental Health

WHEREAS, patients formerly cared for under the Crippled Children's Commission are now under the authority of the Department of Public Welfare; and

WHEREAS, such patients are being treated administratively in essentially the same fashion as adults, and the existing age limitation is meaningless;

NOW, THEREFORE, BE IT RESOLVED, that children in this classification should be treated the same as adults in regard to fee for service.

Resolution No. 10.

(APPROVED)

INTRODUCED BY: Canadian County Medical Society

SUBJECT: Implementation of Resolution 68 Passed by the AMA House of Delegates, June 19, 1963

REFERRED TO: Reference Committee I

WHEREAS, the Canadian County Medical Society, on March 9th, 1964, discussed the above mentioned resolution pertaining to the "importance of the general practitioner as an essential component of American medicine"; and

WHEREAS, once again recognition was taken of the need for "an adequate number of medical school graduates selecting general practice for their medical careers"; and

WHEREAS, the AMA House did resolve to "instruct its Board of Trustees to utilize all facilities at its command to:

"A. Inform the medical schools of the shortage of general practitioners, and request their cooperation in exposing medical students to general practice by lectures, preceptor programs, and clinical instructors who are practicing general practitioners; and

"B. Inform the constituent state medical associations of the need to emphasize general practice training and to ask these associations' mem-

bers to encourage students to go into general practice."

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association House of Delegates likewise take cognizance of this problem and instruct our Board of Trustees to utilize all facilities at its command to implement immediately the intent of Resolution 68 passed by the AMA House of Delegates.

Resolution No. 11.

(APPROVED)

INTRODUCED BY: OSMA Resolutions Committee

SUBJECT: Federal Mental Health Legislation

REFERRED TO: Reference Committee IV

WHEREAS, the mental health bill as passed by the United States Congress in 1963 opens the door for complete socialization of medicine, as well as the complete socialization of our economy;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association go on record as supporting the stand as taken by the Legislative and Public Relations Committee, chaired by Robert C. Long, M.D., at the American Medical Association meeting June 18, 1963, which states as follows:

"Your reference committee unanimously disapproves of the concept of Federal funds for staffing mental health institutions. Indeed, your committee has serious misgivings concerning the propriety of approving the principle of 'bricks and mortar' for mental health centers. Therefore, your committee recommends that the policy of the American Medical Association with respect to 'bricks and mortar' be reviewed and revaluated by the Board with recommendations to be reported to the House at its next annual meeting."

Resolution No. 12.

(APPROVED) *Ruled same in intent as Resolution No. 28.*

INTRODUCED BY: OSMA Resolutions Committee

SUBJECT: Area-wide Planning for Hospitals

REFERRED TO: Reference Committee III

WHEREAS, the United States Public Health Service in collaboration with the American Hospital Association, has conducted a survey and issued a joint report on "Area-wide Planning for Hospitals"; and

WHEREAS, this report, as well as burgeoning literature on the subject, presents the thesis that only the big voluntary non-profit of government hospitals can render complete or the best medical service; and

WHEREAS, these reports, referred to, further advanced the seductive argument that the building of private-for-profit hospitals may deprive a community of an "opportunity" to obtain government funds for a non-profit institution; and

WHEREAS, these reports encourage compulsory area-wide planning for hospitals and other health facilities to be implemented by legalized state agencies; and

WHEREAS, the President of Blue Cross, Mr. Walter J. McNerney, has been quoted as saying "any group which builds without reference to community planning jeopardizes the solvency of Blue Cross"; and

WHEREAS, in one area their Blue Cross tried to deny claims from a hospital which had expanded its plant without consulting its area planning board; and

WHEREAS, federal money is now being used for state-wide surveys for area-wide planning for health facilities in Minnesota, Kansas and Hawaii; and

WHEREAS, efforts are being made in various states to establish compulsory area-wide health facilities planning on a statutory basis; and

WHEREAS, S. 855 by Senator Hubert Humphrey, which passed the Senate last month without debate, affords federal recognition and commendation for all such planning boards and commissions and lays the

ground work for ultimate complete control by such boards;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association, in regular session assembled, this 1st day of May, 1964, opposes compulsory area-wide planning for health facilities and calls on the House of Delegates of the Oklahoma State Medical Association to express this position to the American Medical Association.

AND BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association be instructed to alert the governing boards of the hospitals of this state to the dangers inherent in such compulsory planning.

Resolution No. 13.

(APPROVED)

INTRODUCED BY: OSMA Resolutions Committee

SUBJECT: Opposition to Amendment to Food, Drug and Cosmetic Act Dealing With Proof of Efficacy

REFERRED TO: Reference Committee II

WHEREAS, the Kefauver-Harris Act of 1962, amending the Federal Food, Drug and Cosmetic Act, gives the U.S. Food and Drug Administration for the first time the authority to evaluate the effectiveness of drugs; and

WHEREAS, only the medical profession, after widespread usage, can ultimately determine the true effectiveness of a drug; and

WHEREAS, authorizing a federal agency to deprive physicians of the use of drugs which they may wish to use in their practice is an unwarranted intrusion into the practice of medicine and an improper interference with the physician's responsibilities, and prerogatives; and

WHEREAS, the American Medical Association strongly opposed this grant of authority to a federal agency when this legislation was pending before Congress; and

WHEREAS, this act can only operate to the detriment of the prac-

tice of medicine and the public health; and

WHEREAS, attempts are currently being made to include similar control mechanisms for all medical devices and implants;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association encourage the American Medical Association to attempt to have these provisions authorizing the determination of the effectiveness of drugs by the Food and Drug Administration removed from the Kefauver-Harris Amendment.

BE IT FURTHER RESOLVED, that every effort be made to prevent the enactment of similar federal regulatory legislation with regard to devices and implants.

BE IT FURTHER RESOLVED, that all constituent and component medical associations be urged to join in this effort by soliciting the support of their senators and representatives.

Resolution No. 14.

(DISAPPROVED)

INTRODUCED BY: Pittsburgh County Medical Society

SUBJECT: Enactment of Lien and Family Responsibility Laws

REFERRED TO: Reference Committee II

WHEREAS, the Oklahoma State Medical Association has pledged the cooperation of its membership in giving medical service to the elderly people of our state who are recipients of Old Age Assistance and Medical Assistance for the Aged; and

WHEREAS, the administrator of these programs in the State of Oklahoma finds the funds available inadequate to finance them without making marked restrictions in the payment of these services; and

WHEREAS, the administrator of these programs has asked the Oklahoma State Medical Association for recommendations to aid him in the financing of these programs; and

WHEREAS, it has been definitely proven that in states which have property lien laws and family re-

sponsibility laws, the financial load for implementing these programs is greatly reduced;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association go on record as favoring this type of legislation in Oklahoma.

BE IT FURTHER RESOLVED, that a vigorous effort be made to get this type of legislation introduced into the next session of Legislature.

BE IT FURTHER RESOLVED, that a statewide organization be set up in the Oklahoma State Medical Association for the purpose of dissemination of information and aiding in the passage of this legislation.

Resolution No. 16.

(APPROVED) *Ruled same in intent as Resolution No. 15.*

INTRODUCED BY: Canadian County Medical Society

SUBJECT: Amendments to Medical Practice Act

REFERRED TO: Reference Committee II

WHEREAS, we have learned of the temporary status of the Oklahoma State Board of Medical Examiners in which a complete change of the board may occur at the expiration of the appointments; and

WHEREAS, such a change would result in a lack of experience in usual Board of Medical Examiners procedures and policies; and

WHEREAS, such a change would result in inexperienced although earnest operation of said board; and

WHEREAS, this board is the only body established by statute for the administration of the Medical Practice Act;

NOW, THEREFORE, BE IT RESOLVED, that the House of Delegates of the Oklahoma State Medical Association endorse the changes recommended in the Medical Practice Act as hereto appended.

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association urges the Legislature of the State of Oklahoma to amend the

Medical Practice Act as incorporated in the Appendix to this resolution.

* * * * *

This resolution, if passed, would provide continuity of experience on the Board without altering in any way its powers as granted by law. There are a few minor changes which would clarify terminology but which do not change practice or policy.

APPENDIX

N.B.—The *italicized* words and phrases encompass the suggested amendments to the appropriate sections of the Medical Practice Act.

59 O.S. 1961, Section 481 is hereby amended to read as follows:

Section 1. A State Board of Medical Examiners is hereby established in the State of Oklahoma to consist of seven (7) members who shall be citizens of the United States of America, graduates in medicine from Medical Colleges recognized by Oklahoma at the time of such graduation, and legal and active practitioners of medicine and surgery within the state for more than three (3) years prior to their appointment as members of said Board. *The official name of this Board shall be, State Board of Medical Examiners.*

59 O.S. 1961, Section 482 is hereby amended to read as follows:

Section 2. Immediately after the effective date of this Act, the members of the State Board of Medical Examiners shall be appointed by the Governor from a list of not less than fourteen (14) names submitted to the Governor by the Oklahoma State Medical Association; . . . provided that no member shall be a stockholder in or member of the faculty or Board of Trustees of any medical college or school. *The Governor shall appoint one (1) member to serve for one (1) year, one (1) member to serve two (2) years, one (1) member to serve three (3) years, one (1) member to serve four (4) years, one (1) member to serve five (5) years, one (1) member to serve six (6) years, one (1) member to serve seven (1) years. Their successors*

shall be appointed for a term of seven (7) years and such appointment shall be made by the Governor within ninety (90) days after the term of any member expires and shall be made from a list of three (3) names submitted to the Governor by the Oklahoma State Medical Association. Vacancies shall be filled by the Governor within ninety (90) days after any vacancy occurs and the person so appointed to fill the vacancy shall serve the unexpired term; such appointment shall be made from a list of three (3) names submitted to the Governor by the Oklahoma State Medical Association.

59 O.S. 1961, Section 483 is hereby amended to read as follows:

Section 3. *The State Board of Medical Examiners shall be the successors to the present State Board of Medical Examiners and shall assume all of the duties and responsibilities thereof.*

59 O.S. 1961, Section 485 is hereby amended to read as follows:

Section 5. The State Board of Medical Examiners shall, immediately after the members shall have qualified as such, organize by electing a president, a vice-president and a secretary-treasurer, and thereafter, at the next regular meeting of the Board, held in the first six months of each calendar year, all such offices shall become vacant and be filled by another election, except the secretary-treasurer, who shall serve *at the pleasure of the State Board of Medical Examiners.*

59 O.S. 1961, Section 493 is hereby amended to read as follows:

The State Board of Medical Examiners shall admit any applicant to the regular examination for licensure to practice medicine and surgery within the meaning of this Act, who makes application therefore verified by oath upon forms provided by said Board, and who shall accompany the application with the fee of twenty-five (\$25.00) dollars; provided, that an applicant, to be eligible for examination, must present satisfactory evidence of identification; that he is of good moral character and is not addicted to habitual intemperance

or the habitual use of habit-forming drugs; that he has not been convicted of a felony or a crime involving moral turpitude; that he has never been guilty of unprofessional conduct as hereinafter defined; that his medical license has never been revoked within any other state for cause, that he is not suffering with active *pulmonary tuberculosis* or a draining tubercular lesion or venereal disease, *and that he is a citizen of the United States.*

It is further provided that the applicant must; (a) submit satisfactory evidence that he is a graduate of a legally chartered medical college or university, the requirements of which for graduation shall have been, at the time of such graduation, in no particular less than those prescribed by the Association of American Medical Colleges or the Council on Medical Education and Hospitals of the American Medical Association for that particular year, or, (b) submit satisfactory evidence that he has passed such examinations as the Board may require to determine his educational qualifications to take the regular examinations for licensure to practice medicine and surgery.

It is further provided that the Board of Medical Examiners may, at such time as it deems expedient, require all applicants for licensure a properly verified certificate that they have served a one (1) year's internship in a general hospital which is approved and recognized by the said Board.

Resolution No. 17.

(APPROVED)

INTRODUCED BY: Alfalfa-Woods
County Medical Society

SUBJECT: Practicing Teaching Faculty

SUBMITTED TO: Reference Committee I

WHEREAS, there is a drastic need for more enlightenment of the medical students of the University of Oklahoma for a closer union between the student and practicing physician, and to acquaint him with the practical aspect of medicine;

NOW, THEREFORE, BE IT RESOLVED, that more practicing phy-

sicians be placed on the faculty of Oklahoma University School of Medicine.

Resolution No. 18.
(DISAPPROVED)

INTRODUCED BY: Alfalfa-Woods
County Medical Society
SUBJECT: Identity of Persons Who
Have Previously Sued Physicians
in Oklahoma
REFERRED TO: Reference Com-
mittee IV

WHEREAS, due to the increase in number of physicians of good standing being sued for professional liability;

NOW, THEREFORE, BE IT RESOLVED, that a list of names of the persons suing the physician be published, privately, and sent to all physicians of good standing in the state of Oklahoma.

Resolution No. 19.
(APPROVED AS AMENDED)

INTRODUCED BY: Joe L. Duer,
M.D.
SUBJECT: Board of Trustees Quorum
REFERRED TO: Reference Com-
mittee I

WHEREAS, the activities of the association are assigned to, and carried out by voluntary efforts on the part of the elected and appointed officials of the association; and

WHEREAS, there are many important issues to be considered throughout each year; and

WHEREAS, quorums are often difficult to be had, especially at emergency called meetings;

NOW, THEREFORE, BE IT RESOLVED, that Chapter IV, Section 3.00 of the bylaws shall be amended by adding to and after the last sentence, the words "at which a majority of the trustees shall constitute a quorum; but at special and called meetings, fifteen (15) trustees shall constitute a quorum."

Resolution No. 20.
(DISAPPROVED)

INTRODUCED BY: OSMA Resolu-
tions Committee
SUBJECT: Clarification of Policies,
Joint Commission on Accredita-
tion of Hospitals

REFERRED TO: Reference Com-
mittee III

WHEREAS, there has been much misinformation and loose interpreta-
tion concerning the requirements
and standards of the Joint Commis-
sion on Accreditation of Hospitals;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State
Medical Association obtain a synopsis
or abbreviated summary of said
rules and regulations to distribute
to each member of the association.

Resolution No. 21.
(APPROVED)

INTRODUCED BY: OSMA Resolu-
tions Committee
SUBJECT: Socio-Economic Educa-
tion, O.U. Medical School
REFERRED TO: Reference Com-
mittee III

WHEREAS, it continues to be of great importance that medical students be informed in regard to the socio-economic and legal aspects of medicine; and

WHEREAS, there exists many practicing physicians competent and willing to offer their services to medical students for the accomplishment of this purpose;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma University School of Medicine be encouraged to offer instruction in the socio-economic aspects of medical practice to their students.

Resolution No. 22.
(APPROVED)

INTRODUCED BY: OSMA Resolu-
tions Committee
SUBJECT: Essentials of An Ap-
proved Internship
REFERRED TO: Reference Com-
mittee I

WHEREAS, the Council on Medical Education of the AMA is to submit a revised "Essentials of An Approved Internship" at the Annual Meeting in June, 1964; and

WHEREAS, many community hospitals which provide a good educational program for interns, but do not have a necessity for an organized out-patient clinic;

NOW, THEREFORE, BE IT RESOLVED, that our delegates to the

AMA be instructed to oppose the incorporation of the requirement of an organized out-patient clinic as an essential to an approved internship.

Resolution No. 23.
(APPROVED)

SUBMITTED BY: Oklahoma Coun-
ty Medical Society
SUBJECT: Disability Evaluation For
Compensation Purposes
REFERRED TO: Reference Com-
mittee III

WHEREAS, the present method of evaluating disability and making disability compensaion awards by the State Industrial Commission is unscientific, unfair, and highly questionable, morally; and

WHEREAS, in the awarding of claims there are certain dangers and fallacious practices; to-wit:

1. The expedient policy of simply "averaging" conflicting disability estimates by a physician for the defense and a physician for the plaintiff; thus not carrying out the intent of compensation laws.

2. Equating with equal weight the testimony in disability evaluations between unorthodox practitioners and orthodox specialists in various fields.

3. Assuming that all claimants disability should be awarded disability on the grounds that they should be supported because of financial need without regard for the circumstances of causation, or medical knowledge and testimony;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association brings to the attention of its members the problems, inequities, and abuses in connection with awards now being made under the present system of the State Industrial Commission.

BE IT FURTHER RESOLVED, that the Oklahoma State Medical Association appoint a study committee to meet with members of the Legislature, members of various reputable insurance companies, and members of the Oklahoma Bar Association to explore the abuses of the present system and correct them when possible and recommend a better system in disability evaluations for compensation purposes.

Resolution No. 24.

(DISAPPROVED)

SUBMITTED BY: The Oklahoma County Medical Society
SUBJECT: Service Contracts
REFERRED TO: Reference Committee III

WHEREAS, the agreement by a third party to pay the medical bills (as distinguished from hospital bills) of its subscribers in full, constitutes contracting to furnish medical services; and

WHEREAS, non-physician parties cannot furnish medical services; and

WHEREAS, third parties should not be given the power to offer the services of physicians to anyone, (this power logically and ethically belonging only to the individual physician); and

WHEREAS, the service insurance contract can lead to control of physicians' fees and services by the contracting insurance company, (regardless of whether or not a board of physicians is consulted on establishment of fee schedules); and

WHEREAS, the establishment of a no-fee-schedule service insurance plan is just as vicious as such a plan with a fee schedule; and

WHEREAS, the fee arrangements with patients should be entirely under the control of the patient and his physician;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association is opposed to the offering of service insurance contracts for physicians' fees to any groups or individuals, and calls for the discontinuance of such plans as they are now offered. (This is not to be interpreted as conflicting with present workmen's compensation insurance coverage.)

Resolution No. 25.

(APPROVED)

SUBMITTED BY: The Oklahoma County Medical Society
SUBJECT: Legislation For Treatment of Alcoholic Patients By State Hospitals and Institutions
REFERRED TO: Reference Committee IV

WHEREAS, the present legislation dealing with the treatment of alcoholics in state institutions has proven inadequate; and

WHEREAS, legislation is desperately needed to correct this defect;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association bring to the attention of the Oklahoma State Legislature the existence of this problem and strongly urge that they consider this problem and pass corrective legislation, to-wit:

Action to amend by deletion certain description in the Mental Health Law (1953) amended 1955, and subsequent: O.S. Title 43-A, Section 3—Sub-section (C) to eliminate the phrase, lines 6 and 7, "and chronic alcoholism" (see explanation of proposal).

BE IT FURTHER RESOLVED, that the report adopted by the American Medical Association in Seattle, Washington, November, 1956, a copy of which is attached, be approved by the Oklahoma State Medical Association and the conclusions and recommendations therein contained be included in proposals presented to the Oklahoma State Legislature for study and consideration.

* * * * *

Explanation of Legislative Proposal:

Purpose reflected in this proposed action is to take recognition of both medical and legal acceptance by definition that alcoholism is properly classed as a disease, an illness, that in general it is treatable; that a problem exists in the community, the State of Oklahoma; that some means, method and procedure be permitted, established, and function instituted to cope with such problem; that presently established state institutions may be employed, in part, in such efforts to cope with this problem through recognized administrative function of heads of both the Department of Health and the Department of Mental Health in incorporating as a part of their general programs and procedures the treatment of patients suffering from alcoholism solely or in part; that such elimination of discrimination in basic defi-

nition respecting admission will then permit a beginning at least in coping with this health problem in the state, and without requiring special budgeting, appropriation, facility or enactment therefore to do so.

* * * * *

AMA REPORT OF REFERENCE COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

Doctor William A. Hyland, Chairman, Michigan, presented the following report, which was adopted:

Report of the Board of Trustees Dealing with Hospitalization of Patients with Alcoholism: Specifically, this section refers to a consideration by the Council on Mental Health and its Committee on Alcoholism of the problem of the hospitalization of patients with the diagnosis of alcoholism. Your committee urges the adoption of the following statement of the Council on Mental Health, which is quoted from the report of the Board of Trustees:

1. Alcoholic symptomatology and complications which occur in many personality disorders come within the scope of medical practice.

2. Acute alcoholic intoxication can be and often is a medical emergency, as with any other acute case, the merits of each individual case should be considered at the time of the emergency.

3. The type of alcoholic patient admitted to a general hospital should be judged on his individual merits, consideration being given to the attending physician's opinion, cooperation of the patient, and his behavior at the time of admission. The admitting doctors should then examine the patient and determine from the history and his actions whether he should be admitted or refused.

4. In order to offer house officers well-rounded training in the general hospital, there should be adequate facilities available as part of a hospital program for care of alcoholics. Since the house officer in a hospital will eventually come in contact with this type of patient in practice, his training in treating this illness should come while he is a resident officer. Hospital staffs should be urged to

accept these patients for treatment and cooperate in this program.

5. With improved means of treatment available and the changed viewpoint and attitude which places the alcoholic in the category of a sick individual, most of the problems formerly encountered in the treatment of the alcoholic in a general hospital have been greatly reduced. In any event, the individual patient should be evaluated rather than have general objection on the grounds of a diagnosis of alcoholism.

It is recognized that no general policy can be made for all hospitals. Administrators are urged to give careful consideration to the possibility of accepting such patients in the light of the newer available measures and the need for providing facilities for treating these patients. In order to render a service to the community, provision should be made for such patients who cooperate and who wish such care.

In order to accomplish any degree of success with the problem of alcoholism, it is necessary that educational programs be enlarged, methods of case findings and follow-up be ascertained, be encouraged, and general education toward acceptance of these sick people be emphasized. The hospital and its administration occupy a unique position in the community which allows them great opportunities to contribute to the accomplishment of this purpose. It is urged that general hospitals and their administrators and staffs give thought to meeting this responsibility.

Your reference committee recommends that this action be brought to the attention of the Council on Medical Education and Hospitals from the standpoint of implementing educational approaches to the problem of alcoholism and that it also be referred to the Joint Commission on Accreditation of Hospitals and to the American Hospital Association in an effort to obtain more interest on the part of hospital administrators and their staff toward meeting this ever-increasing responsibility.

Resolution No. 26.

(NO ACTION TAKEN)

SUBMITTED BY: The Oklahoma County Medical Society
SUBJECT: Support of Medically-Approved Family Planning Services in Oklahoma

REFERRED TO: Reference Committee IV

WHEREAS, the members of the medical profession and increasingly greater numbers of the general public now recognize the seriousness of the problem of the population explosion at home and abroad; and

WHEREAS, the unlimited increase of population will certainly lower the living standards of all unless medically-approved family planning methods are made available to low income parents who now have and continue to have more children than they desire; and

WHEREAS, the gap between children wanted and children born can only be closed by charitable institutions and by public health and welfare agencies making effective family planning techniques available to low income Americans and Oklahomans; and

WHEREAS, the Planned Parenthood Association chapters in Oklahoma are recognized charitable institutions devoted to operating clinics under medical supervision and making family planning techniques available to low income families by offering a free choice of techniques, one or more of which is acceptable to all faiths; and

WHEREAS, with the support of local physicians and county medical societies it will be possible to encourage the inclusion of family planning services in the County Welfare Clinics and other charitable medical facilities in the cities and towns of the State of Oklahoma;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association supports the objective of making medically-approved family planning methods available to low income families in the State of Oklahoma by urging its individual members and the county medical societies in this state to:

(1) Support the Planned Parenthood Association in the cities and towns of Oklahoma where it has clinics and is seeking to extend its services;

(2) Encourage the inclusion of family planning services by offering a free choice of techniques, one or more of which is acceptable to all religious faiths in the County Welfare Clinics and other charitable medical facilities throughout the State of Oklahoma.

BE IT FURTHER RESOLVED, that notice of the foregoing resolution shall be distributed to each county medical society in the State of Oklahoma.

Resolution No. 27.

(DISAPPROVED)

SUBMITTED BY: The Oklahoma County Medical Society
SUBJECT: Cigarette Smoking, A Health Hazard

REFERRED TO: Reference Committee IV

WHEREAS, on the basis of a prolonged study and evaluation of many lines of converging evidence, the Surgeon General's advisory committee made the judgment that: CIGARETTE SMOKING IS CURRENTLY A HEALTH HAZARD OF SUFFICIENT IMPORTANCE TO WARRANT APPROPRIATE REMEDIAL ACTION; and

WHEREAS, the Oklahoma County Medical Society is concerned in all matters related to health;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association go on record as accepting the principal findings and conclusions of the report of the Surgeon General's Advisory Committee on SMOKING and HEALTH.

BE IT RURTHER RESOLVED, that the Oklahoma State Medical Association encourage and support education programs relative to this current potential health hazard.

Resolution No. 31.

(APPROVED)

SUBMITTED BY: Samuel R. Turner, M.D., Trustee
SUBJECT: Memorial Resolution to Marshall O. Hart, M.D.

WHEREAS, the Medical Profession and his many friends have been deeply saddened by the death of Marshall O. Hart, M.D., Tulsa, on April 12, 1964, and

WHEREAS, in his lifetime Doctor Hart assumed a position of leadership in the profession to which he was most devoted, serving at various times in the following capacities:

President, Oklahoma State Board of Medical Examiners.

President and Trustee, Tulsa County Medical Society.

Speaker of the House of Delegates, Oklahoma State Medical Association.

Delegate to the American Academy of General Practice.

Vice-President and Trustee, Oklahoma Chapter of the American Academy of General Practice.

President, Trustee and Founding Member, Tulsa Academy of General Practice.

Deputy Chief Examiner, Oklahoma State Medical Examiner System; and

WHEREAS, as Speaker of the House of Delegates of the Oklahoma State Medical Association, Doctor Hart effected important and progressive procedural changes which have improved the efficiency of the body; and

WHEREAS, Doctor Hart was a tireless civic worker in his community and state,

NOW, THEREFORE, BE IT RESOLVED, that this memorial resolution express the appreciation of his fellow physicians and the Oklahoma State Medical Association for the contributions of Marshall O. Hart, M.D., to medicine and the community; and

BE IT FURTHER RESOLVED,

that the profound sympathy of the House of Delegates at Doctor Hart's passing be expressed to his family.

Copy of this resolution to Doctor Hart's family.

Resolution No. 32.

(APPROVED)

INTRODUCED BY: OSMA Board of Trustees

SUBJECT: Congressional Correction of Discriminatory Practice Against the Self-Employed

REFERRED TO: Reference Committee II

WHEREAS, professional people who have practiced their profession as partners or as sole proprietors have been discriminated against in respect to matters pertaining to their retirement; and

WHEREAS, in order to avoid such discrimination professional persons have, under appropriate state laws, formed professional corporations where the stock ownership and the management of such corporations was confined to persons having a license to practice such profession; and

WHEREAS, the Internal Revenue Service is presently considering a proposed amendment to the so-called "Kitner Regulations" which would seriously discriminate against those persons who have adopted a form of a professional corporation to handle the financial affairs of such group, which discrimination in most instances nullifies any effort of such professional people to obtain equal advantages with others who operate in a corporate form; and

WHEREAS, the Self-Employed Individuals Tax Retirement Act of 1962 (commonly known as the Keogh Act, or H.R. 10) provides only a partial removal of such discrimina-

tion and is limited as to the amount of benefit; and

WHEREAS, the discrimination referred to above against professional people is unfair;

NOW, THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Association memorializes the Oklahoma Delegation in the Congress of the United States as follows:

1. That the Association urges Congress to clarify the tax status of professional associations or corporations formed under state law by the adoption of H.R. 9217 and S. 2403, both of which would amend Section 7701 of the Internal Revenue Code of 1954.

2. That the Association urges Congress to adopt H.R. 8771 and S. 2229, having the effects of amending the Internal Revenue Code of 1954, permitting pension and profit sharing plans to provide benefits on a non-discriminatory basis for certain self-employed individuals without limitations on the amount of the contributions.

3. The Association further urges Congress to end the discrimination against self-employed individuals and their retirement benefits, placing all taxpayers on the same basis and without discrimination.

4. That the Association urges Congress and the members of the Oklahoma Delegation in Congress to oppose the proposed amendment to the Kitner Regulations because they are palpably unfair and arbitrary and have the effect of changing earlier regulations in a way that produces discriminatory results. The Association particularly urges the Oklahoma Delegation in Congress to actively support the enactment of legislation which accomplishes the above purposes and objectives.

OSMA 1965 ANNUAL MEETING
May 14th, 15th and 16th
TULSA ASSEMBLY CENTER

The State Convention in Oklahoma City May 1st, 2nd and 3rd marked the end of a successful year in our "Aim for Excellence in Achievement." Never in our organization have we worked together so well to achieve so much. Our sphere of influence through service was widened and many new friendships were made. Our president, Mrs. Tom Sparks, gave her full amount of loyalty and devotion to making "excellence in achievement" a reality. The other officers and committee members gave untold hours of work for community service in their joint effort to build a better world. We are all grateful for the progress made in 1963-64.

In announcing her theme for '64-'65, our new president, Mrs. J. F. York, made known her belief that we should preserve the records of our organization with extreme care so that those who follow after us may profit from our experience. With this thought in mind she chose the extra task of "Preserving Our Medical Legacy." We in Oklahoma are proud to be one of the first medical auxiliaries to be organized. In 1907 a group of Oklahomans recognized the need for an Auxiliary. They saw the value of an organization of doctors' wives, working together to help their husbands in the advancement of medicine and public health. In this crucial year we are going to make every effort to preserve and perpetuate our great legacy. This legacy consists of an inspiration handed down to us by those who organized that first auxiliary in Shawnee with Mrs. W. C. Bradford as president. This group inspired us to cooperate in every way with the medical profession. By studying the early records of how the small groups joined together to become a State Auxiliary in 1907, we can gain still more inspiration to help us carry out their noble aims. In her address to the State Convention, Mrs. York urged the county historians to delve into the history of their group and to record the medical anecdotes and other matters of historical interest. We will gain understanding of the present by looking into the guides and standards of

the past. We have a great story to preserve for the future, for it is through knowledge of past experiences that future progress can be made.

Mrs. William H. Evans, National President-elect, expressed her delight in our theme of "Preserving Our Medical Legacy." She stated that it is extremely appropriate since we have such a rich heritage of service to preserve here in Oklahoma. Mrs. Evans will be installed as president at the forty-first annual convention of the Women's Auxiliary to the American Medical Association to be held in San Francisco June 21-25.

Other important dates in the new year will be the National Fall Conference in Chicago on October 4th, 5th, 6th, 7th, 1964, the Fall Conference in Oklahoma City October 15th, and the Oklahoma Clinical Society in Oklahoma City October 26th-28th. The Southern Medical Convention will be in Memphis, Tennessee, November 12th-16th and the Mid-Winter Board Meeting will be held in Oklahoma City January 21st, 1965. Doctor's Day will be celebrated March 30th and the Oklahoma State Convention will be held in Tulsa May 14th, 15th, 16th. New York City has been chosen as the meeting place of the National AMA Convention June 20th-24th, 1965.

Working with our president, Mrs. York, will be President-Elect, Mrs. Richard E. Witt; First Vice-President, Mrs. Robert M. Stover; Second Vice-President, Mrs. James B. Silman; Recording Secretary, Mrs. Harlan Thomas; Treasurer, Mrs. Earl Bricker, Jr.; and Treasurer-Elect, Mrs. Cotter Murray.

Officers appointed are: Corresponding Secretary, Mrs. Virgil Ray Forester; Historian-Archivist, Mrs. B. J. Cordonier; Parliamentarian, Mrs. Tom Sparks; Editor, Mrs. William R. R. Loney, Sr.; Circulation Manager, Mrs. William C. Pratt; and Associate Circulation Manager, Mrs. Leonard Kishner.

We face the new year with pride in our past and faith in our future. □

Tom C. Points, M.D., Oklahoma City, received a Ph.D. in maternal and child care from the University of Oklahoma on May 31st. He is one of the few physicians in the nation to hold a doctorate in the subject.

James P. Jobe, M.D., El Reno, has joined the teaching-training hospital ship, S.S. Hope, which is now anchored at the port city of Guayaquil, Ecuador. He is one of 34 physicians and dentists serving on the ship's rotating team during the months of June and July. The ship's permanent medical corps is comprised of 80 doctors, nurses and paramedical personnel.

Federal funds are now available for the construction of community mental health centers. Under the "Community Mental Health Centers Act of 1963" Congress authorized \$150 millions to provide up to two-thirds the cost of such centers. Funds will be allocated to states on a per capita income and population basis. Centers must provide inpatient and outpatient services, partial hospitalization, and emergency services 24 hours a day in one of these three, together with consultation and education services to community agencies and professional personnel. Applications for construction funds can be made by public or non-profit agencies to the state agency designated by the Governor to administer the program, and will be approved only on the basis of being a part of the long range mental health planning which is now underway in all states.

The Oklahoma Medical Political Action Committee has employed a full time Executive Director, Mr. Leroy Bridges, formerly associated with the Oklahoma Farm Bureau. Offices have been established at 4400 North Lincoln, Oklahoma City.

Benefits paid by the 77 Blue Shield plans in the United States, Canada, and Jamaica topped the billion dollar mark for the first time in 1963. Blue Shield covered 26.41 per cent

of the U.S. population and 21.07 per cent of the Canadian population in 1963.

Malpractice suits destined for one out of six physicians. As a result of an AMA survey of 14,000 physicians, it has been reported that one out of six doctors, or 17.8 per cent, have faced a professional liability claim or lawsuit. Malpractice claims rose tenfold during 1930-40 and another tenfold during the following decade. Since 1950 there has been a continued upward trend.

If you object to Kildare's medical judgment, don't blame the AMA. The association furnishes medical advice for TV producers of Kildare, Casey and the Eleventh Hour, but it does not control nor endorse the final script. The programs are more authentic with AMA counsel, but the system is not fully protected from the imagination of script writers.

Ways and Means Committee continues its study of the Medicare Bill, Kerr-Mills and Social Security Act. Final recommendations of the committee are not expected until July, but informed Washington observers feel the majority of committee members will hold the line against any health care program financed through an increase in Social Security taxes. However, it is also predictable that O.A.S.I. pensioners will get a raise in their monthly subsistence checks and that the existing Kerr-Mills program for the medically indigent will be expanded by liberalizing amendments.

MEETINGS

- | | |
|------------------------------|---|
| June 21-25 | American Medical Association, San Francisco |
| July 10-11 | Rocky Mountain Cancer Conference, Denver |
| October 13-18 | National Convention, American Association of Medical Assistants, Sheraton - Oklahoma, Oklahoma City |
| October 15-16 | AMA Conference on Aging and Long Term Care, Skirvin Hotel, Oklahoma City |
| October 26-27- and 28 | Oklahoma City Clinical Society |

R.D.--Respiratory Diseases

Cough
Cough
Cough too much
Short of breath
breath
breath

You may have R.D.—Respiratory Disease. See your doctor. This is the message!

It seems that we are constantly hearing, reading and seeing more and more about respiratory diseases and the effects of this and that on the health of our respiratory system. It also seems as if the whole subject is being greatly overdone. This may be. However, it is well known that today the physicians of Oklahoma are actually seeing more and more patients with respiratory diseases. At this moment, respiratory diseases are the fourth cause of illness and lead all diseases in causes of disability.

For this reason, Oklahoma is joining in a nation-wide educational effort toward the understanding of respiratory disease through the Oklahoma Tuberculosis Association and its medical branch, the Oklahoma Thoracic Society. It is hoped that this message will save and prolong useful lives. For many years, the Oklahoma Tuberculosis Association and its affiliated associations have carried on an historic battle for better health, particularly as regards tuberculosis. In Oklahoma new cases of tuberculosis have dropped from 2,200 in 1945 to 768 in 1963. But these figures do not tell the whole story. Unfortunately, tuberculosis remains a significant problem. In Oklahoma a 20 per cent increase in new cases occurred last year. At this moment, a quarter of a million Americans have active tuberculosis; tens of thousands don't even know they are sick. Those not being treated and those not receiving adequate treatment and supervision continue to spread infection. One-fifth of the population or well over 30,000,000 people still harbor such infection and constitute a great potential danger. Therefore, this is a provocative challenge to the medical

profession to continue relentlessly in the fight against tuberculosis.

A further challenge is presented by other thoracic diseases that kill hundreds of thousands of Americans yearly or produce crippling illness or time lost from work. These conditions include chronic bronchitis, emphysema, influenza, pneumonia, lung abscess, fungus diseases and many others. The Oklahoma Tuberculosis Association is engaged in an expanded endeavor to focus attention on these killer diseases and at the same time, continue emphasis on tuberculosis.

To fight the many faceted evils characteristic of respiratory diseases successfully a multitude of weapons is required. Of these weapons, finding and assisting the patient is primary; thus, the R.D. program. People must learn to think of their pulmonary problems and physicians should be willing to think about them and deal with them intelligently.

This educational program is a step forward in the improvement of the health of the people of Oklahoma. Therefore, it is appropriate to encourage every physician to enhance his knowledge of pulmonary diseases in relation to diagnosis and treatment. The Oklahoma Tuberculosis Association and the Oklahoma Thoracic Society are dedicated to disseminate the message of respiratory diseases and wish to encourage all physicians in the State to be alert to the program and cognizant of its purposes and needs.

Respiratory diseases certainly are being talked about a lot these days and rightfully so. It behooves all of us to be educationally and emotionally prepared to deal with them. We, the physicians, must be a potent factor (help) in this assault on respiratory diseases by the Oklahoma Tuberculosis Association. *Edward R. Munnell, M.D., Counselor, Oklahoma Thoracic Society.* □

Increasing Productivity

THERE IS a *great difference* in the respective productivity of doctors, given the same time, effort and knowledge. The difference between high and low income is in direct proportion to the degree of productivity, that is, the volume of work, of which a doctor is capable.

His net income is *not* a result of his charging high or low fees.

There is reason to be impatient with the statement by government officials, labor union men, and some patients, that doctors' incomes are all a result of supply and demand, and that if there were twice as many doctors they wouldn't be making the high incomes which the public thinks they do. This simply is not so . . . there are still many doctors who have low incomes because they are not productive . . . it is feast or famine with doctors as others . . . there are fewer in middle income groups than in other fields of endeavor . . . greater numbers of doctors will not change human attributes causing some to attract and care for many more patients than average.

Sometimes doctors are afraid to step up production for fear they may be accused of "treadmill medicine" by other doctors or patients . . . it is not true that high productivity must be accompanied by poor quality.

Doctor Jon, whom I have been privileged to observe for the last 16 years, is the epitome of optimum production, and I know he has the respect of his colleagues, his patients, and most important, of himself. He sees twice as many patients as other busy doctors and still has time for medical meetings and evenings with his family.

The key to Doctor Jon's success is practice management, through the use of his executive ability and the proper application of his most valuable asset — *time*.

Time cannot be stored away like money, to draw later when needed, but it can be stretched, by doing as Doctor Jon has done, in delegating all responsibilities possible to

capable and adequate personnel . . . apply your time exclusively to medicine for which you were trained.

The girls in a doctor's office must have innate intelligence, proper motivation, adjustment and character . . . all the training in the world will not change the person who is mentally or temperamentally unfit to work in a doctor's office. A doctor may have limitations of personality and manner which can be overcome by proper personnel, or can be greatly emphasized to his detriment by poor personnel.

He needs girls who have a fervent desire to work in a doctor's office despite the longer hours, no lunches, harder physical work than in many industries, and he should pay them well when he finds them willing and intelligent.

A doctor needs to have a girl at his elbow, anticipating his every move, have enough personnel in the various functions of receptionist, bookkeeping and phone answering so that each girl can stay at her post . . . be over-staffed rather than under-staffed, for there is nothing more ephemeral and uncertain than the working life of the average female employee.

The influence your personnel has on *you* so that you can realize your optimum productivity, remembering that if you do not function there is no production, *is so important* it would be better to pay some people not to work for you. I'm serious in this statement. Many times we have suggested that a client pension a well-meaning but well-nigh senile bookkeeper.

While proper facilities are important, if it is necessary to make a choice between good personnel or good facilities, the answer is good personnel, since they can improvise with poor facilities . . . of course, you will realize their ultimate value if they have proper space, equipment and office atmosphere . . . a girl who is good at arithmetic can add a page of figures in her head, but it will save a lot of time if she has an adding machine and even more if she can put the adding machine on a desk instead of holding it in her lap, especially if she is pregnant.

A doctor must have his office methods and routines carefully set forth so that practically all business administration can

Presented by Mr. Clayton L. Scroggins, of the Clayton L. Scroggins Associates, Cincinnati, Ohio, professional management firm at the 58th Annual Meeting of the Oklahoma State Medical Association, May 3rd, 1964.

be carried out by his personnel, such as accumulation of services rendered, application of fees, the extension of credit, the collection of accounts, and explanations to patients . . . to mention only a few.

A hint as to the *future* of increased productivity through data processing or computers might be judged from the physical examinations of an astronaut conducted while he was traveling away from his team of doctors at a rate of 17,500 miles per hour. Such complete examination required only six minutes because of the advanced planning, and the use of equipment . . . think how much more a doctor can do with a patient standing still in front of him.

The capacity of the computers didn't dispense with the human element, however . . . there were altogether 258 physicians involved in the project . . . one-third worked on the problem in advance of the flight, one-third were distributed at tracking stations throughout the world, and one-third functioned in the examination post after the flight had been completed.

Many doctors want us to tell them how to increase productivity through office methods and procedures, but often the problem lies in the doctor himself, in his *lack of organizing the time* he spends with the patients . . . he must learn to be more *decisive and brief* but nonetheless kind and understanding.

Productivity is greatly enhanced when the *time of the doctor* is applied to his strongest talents.

A doctor should not force himself to perform any aspect of his practice if he is not adept at it and if he can restrict his efforts to those aspects of which he is particularly capable and from which he gets greater satisfaction; such as an ophthalmologist performing refractions but not surgery; or an orthopedist excluding surgery of the neck and back; or an internist avoiding gastroenterology.

When the doctor in general practice finds that he is still overburdened after he has excluded obstetrics, and that he is not as productive as his potential would indicate, we may suggest he drop pediatrics.

What are the pros and cons of branch office operations? There are no pros . . .

we counsel our clients to refrain from branch offices. You cannot be in two places at once and it's hard to keep two fires burning at distant points.

What is better use of professional time outside the office?

You know, of course, that you must educate your patients against unnecessary house calls and that you must restrict your activities to a few, or one, hospital if possible.

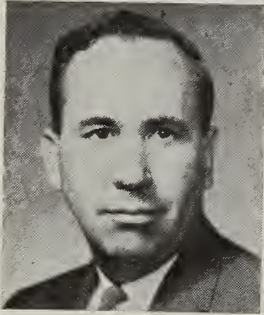
Plan your entrances and exits from the hospitals to avoid interruptions from patients' families, hospital personnel and other doctors . . . upon entering the corridor of a hospital it is best to walk to the far end of the corridor and see your patients on both sides as you make your way to the exit, rather than going up one side and working your way back down the other.

The first way prevents patients from interrupting you with things they think about after you have left their rooms when they see you a second time or hear you on the other side of the hall.

A successful doctor becomes vulnerable for a lot of organizational work and election to offices in various medical societies. If you should be elected president of your county medical society or some other organization, it will be all the more necessary that you realize maximum productivity through proper management so you don't experience a year of economic anemia which we find is a quite common ailment among organizational men. Fame has its price.

Ask yourself if the satisfaction and pleasure you receive from the organizational work, whether it be professional, civic or church, exceeds the strain on your energy and time . . . perform only those roles that are easily within your abilities and avoid any activities that create conflict and frustration.

Regardless of the way in which you practice, alone or with others — regardless of whether your particular problem is too great a volume or not enough — I repeat — with proper practice management, you can increase your productivity *without sacrificing* your primary objective of rendering the finest medical care.—*Clayton L. Scroggins.* □



What visionaries could have predicted the steady growth, pressures, and resultant financial problems of the Department of Public Welfare's medical care program when it all began in 1957? Apparently some members of the OSMA Council and House of Delegates did, because a review of the proceedings of meetings held during the summer of 1957 reveals opposition by the Council and an off-again-on-again attitude of the Delegates.

However, after the smoke cleared away, the Delegates had offered the assistance and cooperation of the association in the implementation of Public Law 880, which made federal funds available to states establishing health care programs for public assistance recipients. Guiding principles were set up for an inpatient "life-in-danger" program limited to seven days per admission. Free choice of physician was prescribed and payments to physicians were to be on an *indemnity* basis.

It was specifically provided in the "principles" that no written contract would be signed with the Department of Public Welfare. Further, it was said that surgeon's payments would be at the rate of seventy-five per cent of the Dependents Medical Care (military) surgical schedule and that \$5.00 a day would be paid for inpatient medical care for a period of ten days.

Since these modest beginnings, benefits to recipients have been liberalized on a number of occasions, new federal laws have been passed and implemented, the indemnity concept has been changed to the service principle, utilization and costs have skyrocketed, and physician's fee schedules have been reduced. This unhappy state of affairs has recently prompted strong reactions from the profession and there is believed to be a general recognition that the program is in bad need of repair.

Obtaining additional financing will solve the payment problem in the short run, but we will still have utilization problems and thought must be given to curing the cause rather than subsidizing the symptom.

Health insurance companies have long recognized that utilization can only be controlled through placing some financial responsibility on the beneficiary, such as a modest deductible on the hospital or doctor bill. An annual ceiling on the number of hospital days to which eligible would also serve as a deterrent to over-use and abuse.

Something along these lines is badly needed, and the doctor, hospital administrators and public welfare officials should seek the advice of professional health insurance experts to get to the root of the utilization problem and take corrective action.

In doing so, the profession must take its rightful share of responsibility for the utilization dilemma. Doctors admit and discharge the patients, albeit with a good deal of assistance from family, friends, hospitals, politicians and county welfare workers.

Until such pressure can be averted by providing the beneficiaries with incentive to conserve hospitalization, practicing physicians had better learn to say no—to provide the care the patient *needs* and not necessarily what he or someone else *wants*.

Harlan Thomas MD

Lymphangiography: Useful Adjunct in Evaluating Testicular Tumors

JAMES R. GEYER, M.D.

Lymphangiography may demonstrate para-aortic lymph node metastasis that is not apparent on physical examination or on excretory urograms.

LYMPHANGIOGRAPHY is the most sensitive radiologic technique for detecting early metastasis from testicular tumors. Except for the rare choriocarcinoma, metastasis from these tumors occurs primarily through the lymphatics and is apt to appear first in the para-aortic nodes near the renal vascular pedicle. It is from this area that the testis develops embryologically and derives its principal blood supply and lymphatics. Next retrograde or collateral metastasis may seed the iliac nodes while dissemination of tumor may occur through the thoracic duct to the venous circulation. A testicular tumor may also spread directly to the iliac nodes if it has invaded the epididymis, and to the inguinal nodes if it has invaded the scrotum. These primary and secondary sites of lymph drainage are readily opacified on roentgenograms by injecting contrast medium directly into a lymphatic in the foot.

Evidence of lymph node enlargement may be obtained with other procedures. Before

the ureter is found to be displaced or obstructed on an intravenous or retrograde pyelogram, however, it is relatively late in the course of the disease. Inferior vena cavography furnishes no information concerning the chain of nodes on the left side of the aorta. Neither carbon dioxide insufflation nor arteriography are worthwhile in this particular problem.

Technique for lymphangiography. The technique is simple and has not been changed significantly since it was described originally by Kinmonth, Taylor and Harper in 1955.⁴ Local anesthesia and the instruments that are available on the standard venous cannulation tray are used. However, cannulating a lymphatic is tedious, and the injection of contrast medium must be done slowly so that the procedure often takes two hours or longer. Adequate premedication helps to keep the patient still. One half milliliter of a 1:1 mixture of four per cent Direct Sky Blue⁺ and one per cent procaine is injected intradermally in the web between the first and second toes. (Other satisfactory vital dyes are 0.5 per cent Evans Blue Dye[#] and Alphazurine 2 G⁺). Within ten minutes a vertical incision is made on the dorsum of the foot between the first and second metatarsals. The blue dye can be seen filling tiny lymphatics just beneath the skin. The most suitable one is isolated, then distended by massaging the blue dye upward from the web between the toes while a rubber tourniquet is tightened around the calf. A number 25 or number 26 hypodermic needle is used to cannulate the vessel and is

From the Department of Urology, Oklahoma City Clinic, Oklahoma City.

secured by catgut ligatures, one of which is tied behind the tip of the needle to prevent the backward escape of contrast medium. The needle is connected by polyethylene tubing to a small syringe, and 10 to 15 milliliters of Ethiodol* is injected manually at the rate of 1 milliliter every five minutes. More rapid injection may rupture the vessel; or if too much Ethiodol is injected it may traverse the lymphatics, enter the venous system and appear in the lungs.

A roentgenogram of the inguinal area should be obtained with a portable machine after a few milliliters of Ethiodol has been injected to be sure that it is actually entering the lymphatics. Upon completion of the procedure roentgenograms are made of the inguinal area and abdomen to show the lymphatics. More films of the abdomen are made four hours later and the next day in order to show the nodes. A roentgenogram of the chest is also made to detect pulmonary embolization of Ethiodol.

When bilateral lymphangiograms are made, the total amount of Ethiodol should not exceed 25 milliliters. Actually we have been content with unilateral lymphangiograms, because our attention has been directed to the side of the testicular tumor, and because the demonstration of crossover lymphatics and contralateral nodes has helped in interpreting the films.

Findings: The lymph trunks are seen to bifurcate and multiply on early roentgenograms with a minimal increase in caliber as they pass upward from the foot. The largest vessels are approximately one millimeter in diameter. Later the ipsilateral inguinal, iliac and para-aortic or paracaval lymph nodes are evident. Usually some contrast medium is seen on the opposite side, beginning at the level of the upper part of the sacrum, although this is subject to variation. With blockage of the normal route of drainage the crossover lymphatics and contralateral nodes are more prominent (figure 1). Finally the lymphatics enter the cisterna chyli which continues as the thoracic duct. The lymph nodes themselves are seen best



Figure 1. On a roentgenogram made two hours after the injection of Ethiodol into the left foot, contrast medium is visible in lymphatics and inguinal, iliac and lower para-aortic lymph nodes. Prominent crossover lymphatics and contralateral nodes are indicative of blockage of the normal route of lymph drainage. Figures 2 and 3 are roentgenograms of the same patient.

on later films. Normally an iliac or para-aortic node is globular or bean shaped, no larger than 1.5 to 2 centimeters in its maximum diameter and shows a homogeneous reticular pattern of contrast material. If the lymph nodes are invaded by metastatic carcinoma, they are increased in size; partial replacement by tumor causes filling defects (figure 2), but if invasion is extensive the contrast material may be present only at the periphery of the node or may bypass it completely (figure 3). The first three figures are roentgenograms of the

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+Wyeth Laboratories
#Warner-Chilcott Laboratories
†Allied Chemical Company
*E. Fougera and Company, Inc.

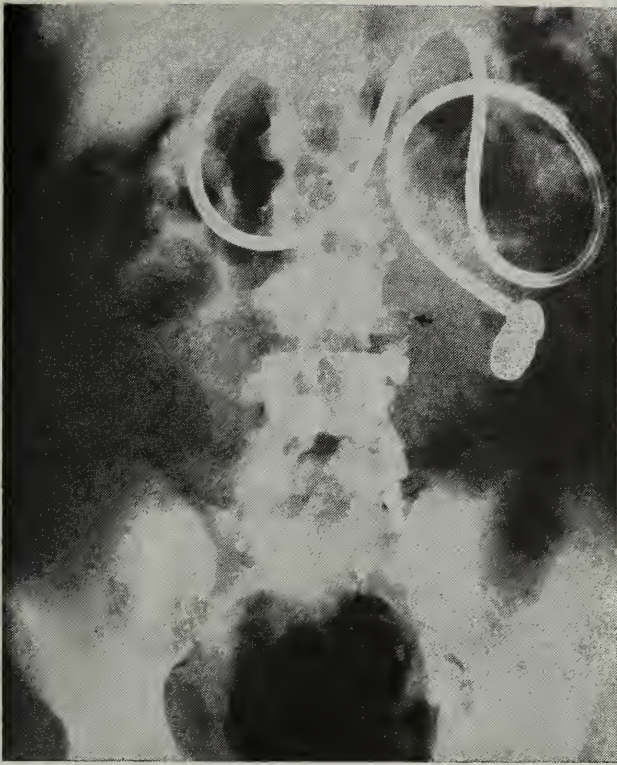


Figure 2. This intravenous pyelogram was made two days after the lymphangiogram. A tube had been passed for pre-operative intestinal decompression. The left kidney was non-functioning because the ureter was completely obstructed by tumor. The arrow indicates a lymph node in which the pattern of contrast medium suggests invasion by neoplasm.

same patient and correlate the pre-operative and operative findings.

False negative or false positive interpretations of lymphangiograms are possible, especially in considering a particular node. A small metastasis may not be obvious, and as pointed out previously, the contrast medium may bypass a large one. In their report on lymphangiography in breast cancer, Kendall and his colleagues noted that fat in the hilum of a lymph node and inflammatory changes simulate carcinomatous deposits.³ Nevertheless, lymphangiography often gives evidence of retroperitoneal metastasis that is not apparent clinically or by other studies. For example, the patient whose roentgenograms are shown in figures 1, 2 and 3 had an excretory urogram which was normal except for slight outward deviation of the left ureter just two weeks prior to the lymphangiogram, even though the metastatic tumor was large enough to completely obstruct the ureter soon afterward.

Complications of lymphangiography. The most common complication is discoloration

resulting from the injection of blue dye, which spreads over the dorsum of the foot; a streak may even extend up the leg to the groin. Although most of the color disappears in a few weeks, a faint tinge may remain for several months. Fine pulmonary embolization of Ethiodol has occurred in two of our patients, one of whom had blood tinged sputum for two days. Because there is a risk of wound infection and lymphangitis, antibiotics have been given prophylactically; none of our patients has had a post-operative infection. Follow-up roentgenograms have shown traces of Ethiodol in lymph nodes as long as a year. Histologically such nodes show a granulomatous reaction.

Treatment of testicular tumors. Initial evaluation of the patient should include a



Figure 3. A roentgenogram of the surgical specimen shows the left kidney, ureter, spermatic vessels, para-aortic and iliac lymph nodes which were removed en bloc; also, a chain of nodes between the aorta and vena cava, and pre-sacral nodes which were removed separately. Ethiodol did not enter the large tumor mass around the ureter just below the kidney. The arrow marks the same node that was pointed out in Figure 2. (Patient was operated on by Doctors D. D. Albers and E. R. Munnell.)

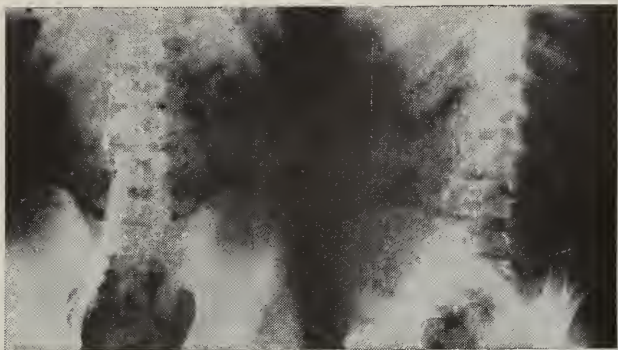


Figure 4. Antero-posterior and right oblique roentgenograms of the abdomen show normal appearing lymphatics and nodes in a patient whose right testis contained a small seminoma. Irradiation was given to the regional lymph nodes, including the contralateral para-aortic nodes.

roentgenogram of the chest, excretory urogram and urinary chorionic gonadotropin titer. Orchiectomy is performed through an inguinal incision so that the spermatic cord can be removed up to the internal inguinal ring. Further treatment depends on the pathologic diagnosis.^{6,9} Irradiation of the regional lymph nodes is generally considered adequate for seminoma. Only chemotherapy promises to be of benefit for choriocarcinoma,⁵ which has an extremely poor prognosis because it metastasizes early through the blood vessels as well as the lymphatics and is quite resistant to irradiation. Bilateral retroperitoneal lymphadenectomy is recommended for embryonal carcinoma, teratocarcinoma and teratoma. When metastasis is found in the excised nodes, irradiation is given. More distant metastases may be amenable to local excision and irradiation, or in otherwise hopeless cases chemotherapy may afford palliation.

Lymphangiography is useful preliminary to either irradiation (figure 4) or retroperitoneal lymphadenectomy. A small metastasis may not be apparent even with this method, but the demonstration of positive nodes has prognostic value and is an aid to the surgeon and to the radiologist. Certainly lymphangiography affords a vivid demonstration of the usual crossover of lymphatics to contralateral nodes, thus emphasizing the necessity for treating both the right and the left para-aortic areas.

Chlorophyll has been added to Ethiodol* to stain the nodes so that they can be iden-

*Ethiodol with chlorophyll, E. Fougera and Company, Inc.

tified more easily at operation. Also, the intralymphatic injection of radioisotopes (I^{131} Ethiodol; Au^{198} ; Y^{90} microspheres) is being investigated^{1,7}; this might prevent spillage of malignant cells during dissection, or if lymph tissue is left behind, it would be less likely to contain viable tumor⁷. After lymphangiography has been done, operative roentgenograms help to gauge the completeness of lymph node dissection². These refinements should improve the efficiency of surgical treatment which, as Tavel and associates have pointed out⁸, is especially difficult in the region of the renal vascular pedicles, the area of primary lymphatic drainage from the testis.

SUMMARY

1. Metastasis from the majority of testicular tumors occurs primarily through the lymphatics and is apt to appear first in the para-aortic nodes near the renal vascular pedicle.

2. Lymphangiography is the most sensitive radiologic procedure for detecting retroperitoneal lymphatic metastases from testicular tumors.

3. The initial treatment of a testicular tumor consists of (a) inguinal orchiectomy and (b) depending upon the pathologic diagnosis, one of the following: bilateral retroperitoneal lymphadenectomy, irradiation or chemotherapy.

4. Lymphangiography helps to gauge the completeness of lymph node dissection and to plan irradiation therapy. □

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Pulmonary Symptoms and Function in 4,922 Southeastern Oklahomans

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RUSSELL F. SHAW, M.D.**
CLAUDE M. BLOSS, Jr., M.D.***

Chronic respiratory disease appears to be a major chronic disease health problem in Oklahoma. The efficiency of screening tests to detect these diseases is described.

SCREENING OF large populations for specific chronic diseases is an attempt to rapidly and inexpensively detect persons most likely to have conditions which potentially could be benefited by early medical attention and those least likely to have such conditions. The usefulness of spirometric time-volume measurements of pulmonary function was evaluated in two county surveys conducted in southeastern Oklahoma as a part of the Oklahoma State Department of Health mobile unit chronic disease screening program.

Population studies on the incidence of pulmonary symptoms and past disease correlated with pulmonary function studies

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have served to emphasize for the British physician the importance of chronic bronchitis and emphysema as important health problems in his country.¹⁻⁶ Only recently have comparable studies been reported from this country.⁷⁻¹³ Hopefully, this survey will serve to alert Oklahoma physicians to the importance of chronic bronchitis and emphysema as a major chronic disease health problem in this state.

METHODS

In this study, the mobile chronic disease screening unit of the Oklahoma State Department of Health surveyed 4,922 subjects in southeastern Oklahoma between February and June, 1961. Subjects were volunteers with pre-scheduled appointments obtained through civic organizations and the local health departments from McIntosh and Pittsburg Counties (total population 50,000 persons) and appear to represent a reasonable cross-section of the adult population in the area.

Information on age and sex along with the height and weight and the interpretation of a 70mm chest roentgenogram were recorded on individual IBM cards for each subject. A "yes" or "no" answer was obtained by one interviewer for each of the following questions: 1) history of previous lung disease (asthma, pneumonia, tuberculosis, etc.), and 2) present symptoms of (a) dyspnea on exertion ("Does shortness of breath prevent you from climbing one flight of stairs without stopping?"), (b) chronic cough, productive or non-productive,

and (c) wheezing, intermittent or constant. In addition, cigarette smoking habits including duration and amount were recorded.

A spirometer** was utilized to record total vital capacity, one-second vital capacity, and an indirect maximum breathing capacity (MBC). No corrections for variations in temperature or barometric pressure were made. Each person screened had one or more practice efforts on the spirometer until he appeared to produce a maximum effort and the best results were recorded.

Regression equations for the indirect maximum breathing capacity (MBC) were computed for each of the groups (male, female; smoker, non-smoker; symptomatic, non-symptomatic). The standard error of these regression lines were also computed in an effort to detect significant differences

in results among the various groups.

RESULTS

Incidence of Pulmonary Symptoms and Signs

Table 1 lists the results obtained from the questionnaire by sex, age group and smoking habits. There was a marked increase in the incidence of cough and wheezing in the smoker groups. The incidence of shortness of breath and the previous history of lung diseases were similar in the smokers and non-smokers when the age differences between the two groups were taken into consideration.

About 60 per cent of all males smoked cigarettes whereas only 20 per cent of the females smoked. Smoking rates decreased as age increased in both sexes. Although the overall incidence of symptoms was lower in women, correction for smoking habits left the incidence of symptoms similar in the two sexes.

**Godart Pulmometer, Instrumentation Associates, Inc.

Table 1
Incidence of Present Symptoms—Previous History of Pulmonary Disease

Group	Sex	Smoking Habits	Total	AGE GROUPS					
				≤30	31-40	41-50	51-60	61-70	≥71
Total Number Studies	M	S	1281	143	263	335	282	199	60
		NS	960	52	108	174	216	241	169
	F	S	510	33	119	198	120	33	7
		NS	2170	46	309	547	605	472	191
Cough, productive, %	M	S	12.3	1.4	7.7	11.2	15.7	22.1	16.7
		NS	6.6	0.0	1.9	2.3	6.0	10.4	11.2
	F	S	10.8	6.1	5.9	13.8	13.3	9.1	0.0
		NS	3.5	0.0	2.3	1.5	3.5	5.5	6.9
Cough, non-productive, %	M	S	7.1	2.1	3.1	10.3	10.4	6.0	8.3
		NS	2.8	0.0	1.9	2.9	1.4	2.5	6.5
	F	S	7.3	9.1	10.9	5.6	5.0	12.1	0.0
		NS	3.0	2.2	2.3	2.4	2.5	3.2	7.4
Wheezing, constant, %	M	S	3.0	0.0	0.8	2.5	4.3	6.1	6.7
		NS	1.1	0.0	0.0	0.6	0.5	1.3	3.0
	F	S	2.0	0.0	0.9	3.6	1.7	0.0	0.0
		NS	0.6	0.0	0.3	0.6	0.7	0.6	0.5
Wheezing, intermittent, %	M	S	18.8	1.4	15.4	16.9	25.7	26.9	26.7
		NS	10.8	0.0	5.6	7.6	11.6	13.0	17.2
	F	S	18.9	15.2	16.1	17.5	25.2	21.9	0.0
		NS	5.9	6.5	4.2	4.0	7.0	6.2	9.4
Shortness of breath, %	M	S	9.3	0.7	2.7	7.2	13.2	20.1	16.7
		NS	11.3	0.0	2.8	6.4	9.8	11.2	27.1
	F	S	9.7	9.1	6.0	8.6	6.7	33.3	42.9
		NS	14.3	6.5	8.4	9.9	15.6	16.7	27.8
Previous history of lung disease, %	M	S	28.6	14.0	20.9	24.0	35.8	1.9	45.0
		NS	31.2	26.9	19.4	30.1	33.7	3.6	34.7
	F	S	34.1	18.2	30.5	32.8	40.8	46.9	28.6
		NS	29.1	26.1	23.8	25.3	32.7	30.2	35.3

Table 2

Pulmonary Function Data on 4,922 Subjects Studied on Mobile Unit Screening Program

Group	Sex	Smoking Habits	No.	%*	Mean Age	Mean MBC	Per cent Screened Positive
1. No past history of lung disease and asymptomatic at present	M	S	752	58.7	42.0	114.7	6.8
		NS	592	61.8	49.9	113.1	2.1
	F	S	260	50.4	42.4	85.8	4.7
		NS	1341	61.8	48.9	82.1	2.5
2. Past history of lung disease without signs or symptoms at present	M	S	189	14.7	49.9	104.0	3.8
		NS	216	22.4	55.0	105.7	2.3
	F	S	102	20.0	47.0	79.3	8.8
		NS	465	21.4	53.8	74.6	5.8
3. No past history of lung disease but having symptoms now	M	S	177	13.8	50.4	100.1	8.5
		NS	75	7.8	61.2	94.1	2.7
	F	S	83	16.3	45.8	76.7	14.5
		NS	216	10.0	55.0	71.3	7.4
4. Past history of lung disease with signs or symptoms	M	S	164	12.8	54.5	82.5	25.6
		NS	77	8.0	64.9	74.9	22.1
	F	S	65	12.7	47.8	71.8	13.8
		NS	148	6.8	57.5	65.1	12.2
Total	M	S	1282	—	48.0	103.4	9.5
		NS	960	—	56.9	100.8	5.4
	F	S	510	—	45.8	79.3	8.6
		NS	2170	—	53.6	74.5	5.9
TOTAL	M	S	2242	—	51.6	101.8	6.7
	F	NS	2680	—	52.1	75.5	5.0

*Represents per cent of all studied (male smokers, male non-smokers; female smokers, female non-smokers).

PULMONARY FUNCTION TESTS

Table two shows the distribution of these subjects in the previously described groups with mean age and indirect MBC for each group. In each group with an adequate number of subjects, smokers tended to have lower indirect MBC's than did non-smokers. Groups one and two in both the male and female populations showed comparable mean indirect MBC's suggesting that a previous history of lung disease alone was of little or no importance unless signs or symptoms of pulmonary disease were also present. MBC's on subjects in Group four (symptomatic and a past history of lung disease) averaged 10 to 20 per cent below the asymptomatic groups. Group three subjects (symptomatic but no past history of lung disease) had intermediate decreases in the indirect MBC's.

THE INDIRECT MBC
AS A SCREENING TEST

Tabulations were made of subjects with indirect MBC's at least two standard devia-

tions below normal values (the asymptomatic non-smoking male and female groups were taken as norms).

At this arbitrary screening level 151 (6.7 per cent) of 2,242 males would have been considered referred for additional pulmonary evaluation. Seventy-six of these subjects (50 per cent) had signs or symptoms of pulmonary disease (Groups three and four). Thus, 19 per cent of the symptomatic subjects and 4.3 per cent of the asymptomatic subjects (Groups one and two) would have been referred. In the female population 135 of 2,680 subjects (5.0 per cent) would have been referred. Of these 54 (40 per cent) would have come from the symptomatic groups so that 10.5 per cent of the symptomatic and 3.7 per cent of the asymptomatic subjects would have been referred.

If only those findings on the chest roentgenogram, *i.e.*, significant pulmonary findings (fibrosis, emphysema or pleural changes) were considered in evaluation of referral, the results obtained would be as follows. Of 70 male subjects showing significant pulmonary pathology on roentgenogram, 32 (46 per cent) would have been re-

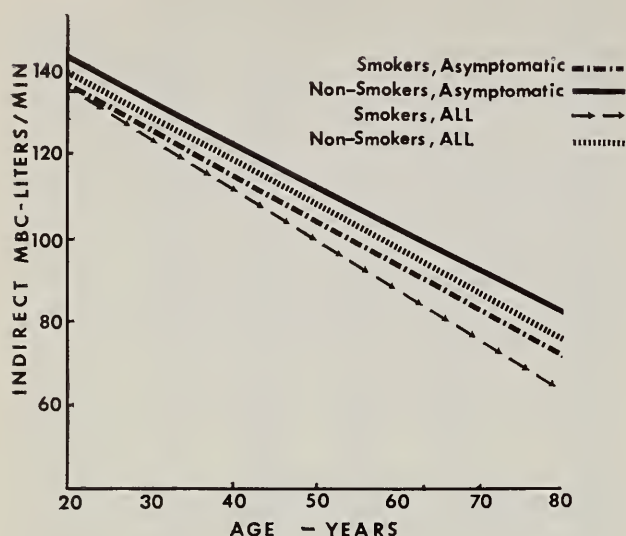


Figure 1. Regression lines for the indirect MBC's of four selected groups: All non-smokers, all asymptomatic non-smokers, all smokers, and all asymptomatic smokers.

ferred. Of 25 female subjects, 11 (44 per cent) would have been referred.

Figure one illustrates the regression lines for the indirect MBC's related to age for all male smokers and non-smokers and only asymptomatic male smokers and non-smokers. No statistically significant difference¹⁴ in mean MBC's between the smoker and non-smoker subjects were apparent in either the younger ages or in the elderly. Likewise, there was no significant difference in the asymptomatic subjects.

DISCUSSION

The greatly increased incidence of cough and wheezing observed in smokers by others also was seen, in this survey.^{2,15,16} No increase was seen, however, in the incidence of previous history of lung disease or present complaints of dyspnea on exertion in smokers.

Time-volume measurements of pulmonary function appear to provide a more valid index of pulmonary function than does the vital capacity alone. The indirect MBC was chosen for use in this study because of its simplicity and reproducibility.

Using the indirect MBC as a screening device, chronic bronchitis and emphysema should be the most frequently detected abnormalities. One of the problems encountered

in this study was how to determine whether or not a given individual had pulmonary disease, or more specifically chronic bronchitis and emphysema. As a questionnaire and chest roentgenogram were the only independent means available for making this decision, a diagnosis of chronic bronchitis (and emphysema) was based on the presence of the symptoms of cough, wheezing, and dyspnea and on the chest roentgenogram. These match the criteria used by others in making the diagnosis of chronic bronchitis and emphysema.¹⁷⁻¹⁸

Many of the subjects studied may have had clinical evidence of pulmonary disease which was not symptomatic or apparent on the chest roentgenogram. This is suggested by the fact that mean values for the indirect MBC for the asymptomatic males were 20 per cent less than those reported for clinical normals in the VA-Army cooperative studies (based on the FEV_{1.0}sec).¹⁹ Furthermore, many subjects with only minimal symptoms such as "cigarette cough" were included in the symptomatic groups and undoubtedly had no significant pulmonary disease.

Although there was a higher percentage of symptomatic than asymptomatic subjects considered referred, many with significant disease, even with significant pulmonary disease on chest roentgenogram would not fall below the arbitrary screening levels necessary for referral. It would be necessary to use screening levels for males nearly 40 per cent below the mean for the asymptomatic males in our study and nearly 50 per cent below those predicted for normal males by the VA-Army cooperative study in order to prevent over-referral.

The usefulness of the indirect MBC as a primary screening device could not be established in this study. Correlations of the indirect MBC's with symptoms and signs (chest) of pulmonary disease was poor. The range of normal is wide and what may be abnormal for one individual may be normal for another even when height, weight, age and smoking habits are taken into consideration. Many asymptomatic individuals would have to be referred in order to detect a higher percentage of those with pulmonary signs and symptoms. Although the value of the indirect MBC as a screening device could not be established in this study, per-

haps if a more complete medical evaluation looking for early pulmonary disease had been utilized in the evaluation of the indirect MBC, its value would have been more apparent.

SUMMARY

A survey of pulmonary symptoms and functions, the latter obtained utilizing the indirect MBC, was conducted on 4,922 persons in rural southeastern Oklahoma.

A significant increase in the incidence of cough and wheezing and a decrease in the indirect MBC was seen in smokers.

Present definitions and diagnostic criteria for chronic bronchitis and emphysema are based primarily on the presence of symptoms of productive cough, wheezing, and dyspnea and on chest roentgenographic abnormalities. Pulmonary function testing under field conditions did not prove effective in separating individuals with symptoms and roentgenographic signs of pulmonary disease from those without symptoms and signs.

ACKNOWLEDGMENT

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Mechanisms of Hypotension and Hypertension

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Successful therapy of abnormal blood pressure depends upon an understanding of the determinants of pressure and upon knowledge of the determinants altered in disease.

ABNORMAL BLOOD PRESSURE is a sign of disease. Just as there are many diseases that produce fever, so there are many diseases that produce hypertension and hypotension. This is because blood pressure is determined by many direct and indirect factors. Therefore, there are many ways in which the pressure can become abnormal.

DETERMINANTS OF MEAN ARTERIAL BLOOD PRESSURE

Figure one indicates the immediate and remote determinants of mean arterial blood pressure. The mean pressure in the aorta is immediately determined by the cardiac output and the resistance to blood flow through the peripheral vascular beds. A rise in cardiac output will increase blood pressure while a fall in cardiac output will decrease blood pressure. The cardiac output is in turn determined by two factors, the ability of

the heart to pump blood and the amount of blood returning to the heart from peripheral vascular beds. Other things remaining constant, a decrease in either variable will lower cardiac output and blood pressure while a rise in either variable will raise cardiac output and blood pressure. The ability of the heart to pump blood¹ is altered by nervous, chemical and physical factors and by organic disease. The venous return is altered by a change in the absolute volume of blood in the vascular system or by redistribution of blood within the vascular system so as to vary the amount available to the heart (a change in the effective blood volume). Absolute volume is changed by hemorrhage, transfusion, capillary filtration or capillary reabsorption. Effective volume is changed by localized venous constriction (for example, pooling in splanchnic viscera subsequent to hepatic venous con-

1. Stroke volume is inversely related to the pressure against which the heart pumps and directly related to the myocardial strength and the diastolic ventricular volume (initial fiber length). Diastolic ventricular volume is directly related to the volume remaining in the ventricle at the end of systole, the filling pressure, the diastolic filling time, and the compliance of the ventricular wall and is inversely related to the resistance to blood flow through the atrioventricular valve. Hence, a detailed analysis of the determinants of cardiac output would include a consideration of arterial pressure, strength, venous pressure, heart rate, wall compliance and valve resistance and the ways in which these six variables are altered by nervous, chemical and physical factors and by organic disease. For example, the maximum cardiac output observed in the intact animal occurs during heavy muscular exercise. The most important cardiac factors producing this increase in cardiac output appear to be increases in heart rate and myocardial strength, both brought about through neurohumoral mechanisms. The exercise is apparently accompanied by little if any increase in diastolic ventricular volume. On the other hand, the rise in cardiac output produced by overtransfusion results largely from an increase in strength occurring via the Starling mechanism. The increase in venous return raises filling pressure which in turn increases the diastolic ventricular volume (initial fiber length) and, hence, strength.

striction), splenic contraction or relaxation, generalized venous constriction or generalized venous dilation.

The other factor that immediately determines the mean pressure in the aorta is the resistance to blood flow through the peripheral vascular beds. A rise in resistance will increase aortic pressure while a fall in peripheral resistance will do the reverse. The peripheral resistance is in turn determined by two factors, the viscosity of the blood flowing through the peripheral vascular beds and the geometry of the blood vessels through which the blood flows. Thus, cardiac output and geometry remaining constant, an increase in blood viscosity will raise blood pressure while a fall in blood viscosity will decrease blood pressure. Viscosity may change in many ways but the most frequent mechanism is through alteration in the hematocrit. The viscosity rises rapidly as hematocrit is increased above 45 per cent but falls slowly as hematocrit is decreased below 45 per cent. The geometric component of resistance is determined by vessel length and radius. Vessel length is ordinarily a constant, except perhaps in the lung during inspiration and expiration, but vessel radius is highly variable. A decrease in vessel radius will increase peripheral resistance while an increase in radius will decrease peripheral resistance. The radius may change through active and passive mechanisms. An active change in radius refers to any change resulting from an alteration in the contractile state of the smooth muscle in the vessel wall. The contractile state of vascular smooth muscle is altered by 1) nerves, mainly sympathetic, 2) chemicals such as epinephrine, norepinephrine, acetylcholine, angiotensin, histamine, bradykinin, serotonin, pitocin, vasopressin, steroids, growth hormone, parathormone, thyroid hormone, anions (pyruvate, acetate, citrate, fumarate, malate, glutarate, succinate) and cations (H^+ , K^+ , Mg^{++} , Ca^{++}), and 3) physical agents such as temperature and pressure. A passive change in radius refers to any change resulting through mechanisms other than change in the contractile state of vascular smooth muscle. Thus, organic changes such as atherosclerosis, thrombosis, intimal hemorrhage and vessel wall edema or dehydration cause a passive

change in vessel radius. Furthermore, the radius may change passively through an alteration in the trans-mural pressure (the difference between intraluminal and extraluminal pressure). Vessels, particularly those in the lung, are not rigid and, therefore, respond to a rise in transmural pressure by enlarging and to a fall in transmural pressure by collapsing. Thus, for example, part of the rise in peripheral resistance in hemorrhage results from passive narrowing of blood vessels subsequent to fall in intraluminal (and hence transmural) pressure.

THE CONTROLLING SYSTEM

The pressoreceptor in the carotid sinus and aortic arch is part of a system which is primarily responsible for keeping the arterial pressure at the normal level. This is necessary to assure a reasonably constant blood flow through the most vital organs such as brain and heart. The pressoreceptor in the carotid sinus is attached to the carotid sinus nerve which is a branch of the glossopharyngeal nerve. The pressoreceptor in the aortic arch is attached to the aortic depressor nerve which runs in the vagus. These receptors are stimulated by a rise in arterial pressure and become less stimulated by a fall in arterial pressure. A consequent series of events in the medullary centers and autonomic nervous outflow from the centers brings the blood pressure back to normal.

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Thus, the pressoreceptor can be thought of as the monitor of the blood pressure.

A rise in blood pressure produces a reflex slowing of the heart by increasing the activity in the vagus nerve. In addition, it produces peripheral vasodilation by decreasing the activity in the sympathetic vasoconstrictor fibers. This vasodilation involves both arteries and veins. Thus, the blood pressure returns to normal both because of a decrease in peripheral resistance, caused by dilation of arteries, and because of decrease in cardiac output, caused by decrease in heart rate and decrease in venous return subsequent to the venous dilation. This chain of events is called a depressor reflex.

A fall in blood pressure produces the reverse effects and, in addition, activates the cardiac sympathetic nerves. There occurs a reflex speeding of the heart, due to decreased activity in the vagus nerve and increased activity in the cardiac sympathetic nerves. The increased activity in the cardiac sympathetic nerves also increases the strength of the cardiac contraction. Constriction of peripheral arteries and veins results from increased activity in the sympathetic vasoconstrictor fibers. Thus, the blood pressure returns to normal both because of an increase in cardiac output and an increase in peripheral resistance. The rise in cardiac

output results from three changes, 1) increased heart rate, 2) increased strength of contraction, and 3) increased venous return subsequent to venous constriction. Peripheral resistance rises because of artery constriction. This chain of events is called a pressor reflex.

Essentially the same chain of events is initiated if the carotid sinus and aortic depressor nerves are sectioned. However, now the blood pressure rises above the normal level. This is an example of a true neurogenic hypertension. When these four afferent nerves are sectioned, all of the traffic leading to the medullary centers is interrupted. This leads to a decrease in traffic down the vagus and an increase in traffic down the sympathetic vasoconstrictor and cardiac nerves. The result is increased rate of contraction, increased strength of contraction, and venous constriction, all leading to a rise in cardiac output, and artery constriction, leading to a rise in peripheral resistance. The rise in cardiac output and increase in peripheral resistance raise the blood pressure level above normal. This type of neurogenic hypertension is characterized by an increased pulse rate, increased cardiac output, increased extremity blood flow, slightly elevated total peripheral resistance, marked blood pressure fluctuation, and a hypertension which is exquisitely responsive to adrenergic blockade or sympathectomy.

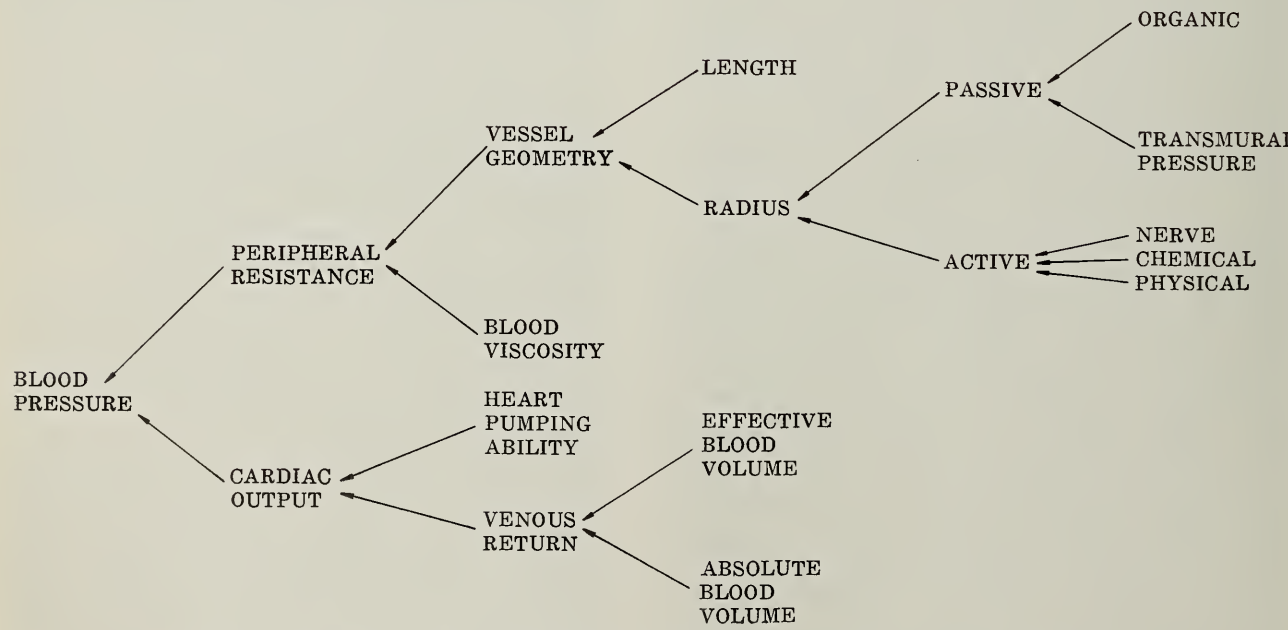


Figure 1. Immediate and remote determinants of mean arterial blood pressure.

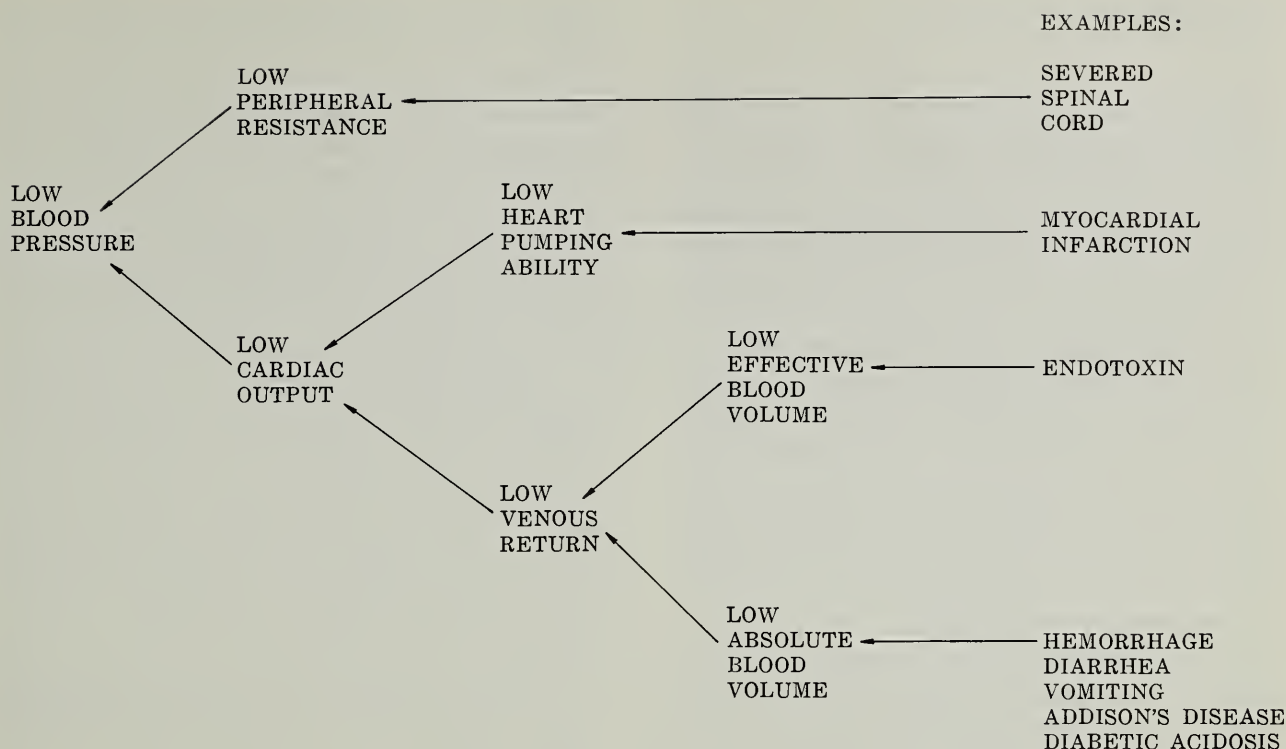


Figure 2. Mechanisms of low blood pressure.

The monitor can be fooled. External compression of the carotid sinus is perceived by the monitor as a rise in blood pressure. Therefore, compression of one or both sinuses with the fingers will cause a fall in blood pressure due to decrease in cardiac output and peripheral resistance.

MECHANISMS OF LOW BLOOD PRESSURE

Hypotension is most often caused by a decrease in the cardiac output. Figure 2 shows that the fall in cardiac output may come about in three ways. Cardiac output may fall because of malfunction of the pump. Examples of this are myocardial infarction, rupture of the aortic valve and paroxysmal ventricular tachycardia. Cardiac output may also fall because sufficient blood does not reach the heart from the periphery. This may come about in two ways. The most common cause is reduction of the absolute volume of blood in the vascular system. Examples are hemorrhage, Addison's disease, diabetic acidosis, diarrhea and vomiting. A less common cause is redistribution of the blood in the vascular system in such a way as to make part of it unavailable for return to the heart. While the absolute volume remains the same,

the "pooling" reduces the effective volume. This mechanism is the cause of the low cardiac output and, hence, of the hypotension seen following administration of Gram negative endotoxin to dogs. The "pooling" seems to result in part from constriction of hepatic veins. It is possible that a similar mechanism operates in septicemic shock in man.

Hypotension is also sometimes in part related to a decrease in peripheral resistance. Examples are a severed spinal cord, spinal anesthesia, vasovagal syncope, and orthostatic hypotension following surgical sympathectomy, administration of antihypertensive agents and diabetic visceral neuropathy. However, in these conditions, the blood pressure is low also because of a decrease in cardiac output. The cardiac output falls because venous dilation permits "pooling" of blood in veins thereby decreasing the venous return to the heart. In vasovagal syncope, the cardiac output is also low because of bradycardia.

As indicated under "The Controlling System," a fall in blood pressure immediately evokes compensatory changes which tend to return the blood pressure to the normal level. These compensatory changes are most successful when the hypotension is due to a low

cardiac output. Tachycardia, increased force of contraction and peripheral constriction, all induced reflexly through the pressoreceptor mechanism, may return the blood pressure completely to the normal level. These changes account for the rapid thready pulse and pale cold skin seen, for example, following hemorrhage or myocardial infarction. Of course, if the degree of reduction in venous return or the heart damage is severe, the mechanism will only partially compensate the blood pressure. When hypotension is due to a low peripheral resistance, compensation more often falls short of the mark. This, of course, is because the nervous pathways used for compensation are anatomically or functionally interrupted.

Since there are different causes of hypotension, the therapy cannot always be the same. The treatment for hypotension due to a low absolute blood volume is to replace the lost volume with a fluid appropriate to the disease. Thus, blood is given for hemorrhagic hypotension and saline is administered for the hypotension of Addison's disease. The therapy of hypotension due to a low peripheral resistance is to elevate the peripheral resistance with a sympathicomimetic agent. The various agents available differ in their effectiveness on arteries, veins and heart. For example, levarterenol pro-

duces potent stimulation of all three while angiotensin produces potent stimulation of arteries and only minimal stimulation of veins and heart. The appropriate agent for the hypotension due to a severed spinal cord is one that produces both artery and vein constriction. The treatment for hypotension due to a low pumping ability of the heart is to restore pumping ability. Thus, rest and digitalis might be appropriate therapy for the hypotension of myocardial infarction. An antiarrhythmic agent is appropriate therapy for the hypotension of paroxysmal ventricular tachycardia. When hypotension is due to a low effective blood volume, an attempt is made to bring about normal distribution of the volume. Successful treatment of the infection might automatically accomplish this in endotoxin hypotension.

MECHANISMS OF HIGH BLOOD PRESSURE

Elevated mean and diastolic pressures almost always result from an increase in peripheral resistance. While an elevated cardiac output by itself will also raise blood pressure, most conditions that increase cardiac output also decrease peripheral resistance thereby leaving mean pressure unchanged. Examples are exercise, hyperthyroidism and arteriovenous fistula. A decrease in aortic compliance in the absence of a change in either cardiac output or peripheral resist-

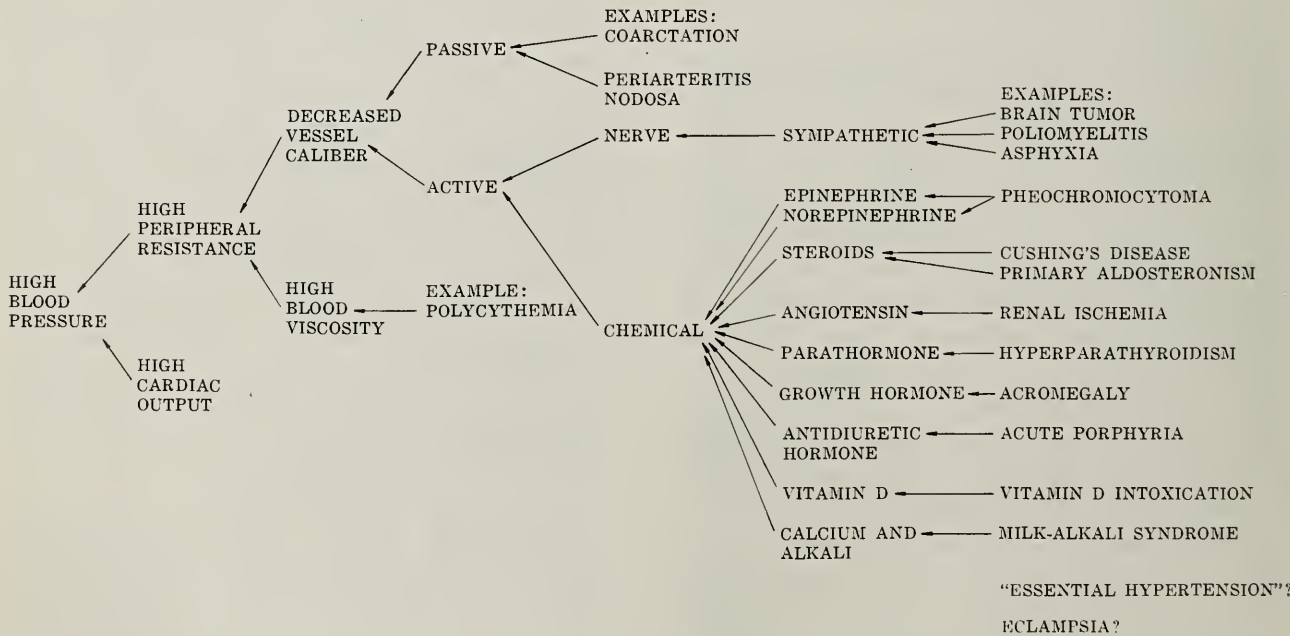


Figure 3. Mechanisms of high blood pressure.

ance will raise systolic pressure but a concomitant fall in diastolic pressure again leaves the mean pressure unchanged. An example is atherosclerosis of the aorta. Hence, in the genuine hypertensions, we must look to the peripheral resistance (figure 3).

A high peripheral resistance and, hence, a high blood pressure can result from an increase in blood viscosity. An example is polycythemia vera when the hematocrit is about 60 per cent. Most hypertensions, however, result from a reduction in vessel caliber. A few of these are initiated through passive vasoconstriction. Examples are coarctation of the aorta and periarteritis nodosa. In most instances, the reduction in vessel caliber results from active constriction of the smaller arteries and arterioles. The active constriction can occur through increased activity of the sympathetic nervous system. Increased intracranial pressure from brain tumor or intracranial hemorrhage causes anoxia of the medullary vasomotor center which in turn causes an autonomic discharge (Cushing reflex). Asphyxia also activates the sympathetic nervous system through direct actions of hypercapnia and hypoxia on the medullary centers and through indirect actions of hypercapnia and hypoxia on the medullary centers via the carotid bodies. Many chemicals cause hypertension through active peripheral constriction. Examples are excess epinephrine and norepinephrine from a pheochromocytoma and excess steroids in Cushing's disease and primary aldosteronism. With renal ischemia, renin is liberated from the kidney causing the formation of angiotensin in plasma and lymph. While angiotensin is a powerful vasoconstrictor, it also stimulates the production of steroids. Evidence is accumulating to indicate that the latter action causes the hypertension. Excess parathormone, growth hormone, anti-diuretic hormone, vitamin D, and calcium and alkali also are associated with active constriction and hypertension. How these chemical agents cause active constriction is not definitely known but the mechanism may well be related to the electrolytes. Hypokalemia, alkalosis, hypomagnesemia and

hypercalcemia occur frequently in these conditions and these blood electrolyte abnormalities will cause constriction in a test system.

The causes of the active constriction in essential hypertension and eclampsia are not definitely known. Further study may show the causes to be one or more of those mentioned above.

One may inquire why the controlling system does not return the blood pressure to normal in the hypertensive subject. It appears that the pressoreceptor mechanism operates normally but that it is reset at an elevated level, much as one can reset the thermostat of a heating unit in a home. Alterations in blood pressure are corrected as promptly and efficiently as in the normotensive individual. However, the correction is carried out around the hypertensive level. Perhaps the pressoreceptors quickly adapt to the elevated pressure much as touch receptors in the skin adapt to a steadily applied pressure.

Clearly, since there are many causes of hypertension, there must be many treatments for hypertension. The treatment of the hypertension of increased intracranial pressure is to lower the intracranial pressure. When the hypertension is due to asphyxia, the treatment is to relieve the asphyxia. Removal of the tumor or hyperplastic tissue is specific therapy for the hypertension of pheochromocytoma, primary aldosteronism, Cushing's disease, hyperparathyroidism and acromegaly. The treatment of the hypertension in vitamin D intoxication and milk-alkali syndrome is to withdraw the offending agents. The treatment of the hypertension of renal ischemia is to correct the obstruction in the renal artery surgically. Until the causes of essential and eclamptic hypertension are known, the therapy of these hypertensions must continue to be non-specific. This type of therapy is useful. It lowers the pressure and thereby undoubtedly prevents some of the organic changes in the cardiovascular system. However, it does not cure the disease. □

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Retroperitoneal Fibrosis

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The increasing number of case reports and the energetic speculation as to etiology has led to increased interest and more frequent diagnosis of this disease entity.

RETROPERITONEAL FIBROSIS was first described by J. K. Ormond⁶ in 1948. Since his description, numerous reports indicate that the condition, although still idiopathic, is now an accepted disease entity.

This report describes the first recognized case of retroperitoneal fibrosis at The University of Oklahoma Medical Center.

Case Report: G.A.H., a 63-year-old white male, was admitted to the Veterans Administration Hospital at The University of Oklahoma Medical Center July 25th, 1961, with the chief complaint of left flank pain. One month before admission he had a brief episode of pain in the right flank. Intravenous urograms shortly afterwards revealed a questionable left hydronephrosis. Three days before admission to the Veterans Administration Hospital, he again developed pain in the right flank and groin as well as dis-

comfort in the left costovertebral angle. He had some temperature elevation associated with occasional chills.

Past History: The patient had diabetes mellitus which was well controlled by Orinase. He was sensitive to penicillin. He developed thrombophlebitis in the left leg following an injury while in the Armed Forces and still wore an elastic stocking. He was a moderate cigarette smoker and drank alcoholic beverages occasionally.

Physical Examination: His blood pressure was 150/86; the temperature 98.8° F. The patient was a thin, well-developed, well-nourished, white male. There was tenderness in the right flank and right lower quadrant but no muscle guarding was present. He had tenderness in both costovertebral angles, more marked on the right. There was evidence of old thrombophlebitis in both extremities.

Laboratory Data: The hemoglobin was 12.6 gm, the hematocrit 38 per cent. The white blood cell count was 7,500 with a normal differential. The fasting blood sugar was 90 mgm per cent; the blood urea nitrogen was 16 mgm per cent; serum calcium 4.9 mEq/L; serum phosphorus 3.3 mEq/L; serum uric acid 5.6 mgm per cent. A urinalysis showed pH 5.0, Sp. G. 1.014, Protein — one plus, Sugar — negative, Microscopic — 2 to 4 white blood cells and 20 to 30 red blood cells per high power field. Three urine cultures showed no growth after 72 hours' incubation. The electrocardiogram suggested left ventricular hypertrophy.

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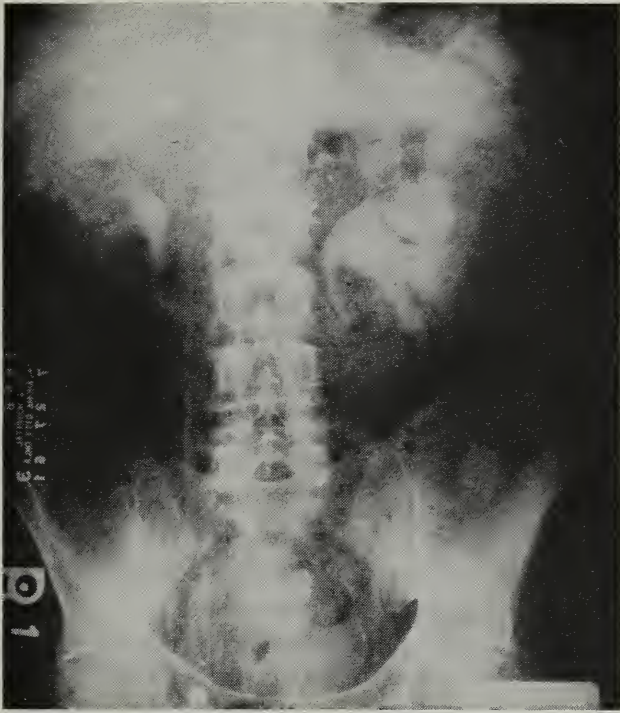


Figure 1: Pre-operative intravenous urogram.

Roentgenogram of the chest was within normal limits. An intravenous urogram (figure 1) showed severe hydronephrosis with dilation of the left upper ureter for 5 cm. below the ureteropelvic junction. The left ureter was not visualized below this point. There was good right renal function with slight ureteral dilation. Retrograde pyelograms (figure 2) also showed left hydronephrosis with two areas of narrowing in the left upper ureter, three and four cm. below the ureteropelvic junction.

Hospital Course: With a tentative diagnosis of neoplastic or inflammatory disease of the left upper ureter, surgical exploration of this area was done through a left flank incision. A hard, fibrous tumor mass was encountered which involved the lower pole of the kidney and surrounded the upper ureter a distance of approximately four cm.

The involved ureter was dissected from its bed and replaced in a bed of adjacent adipose tissue. A four cm. incision was made in this portion of the ureter which was not closed. The ureter was splinted with a number eight F ureteral catheter. The ureteral catheter was brought out through the kidney and anchored to a nephrostomy catheter.

The post-operative course was marked by frequent bouts of fever. After removal of the ureteral splint and nephrostomy cath-

ters, however, the urinary infection gradually subsided. An intravenous urogram at the time of discharge revealed prompt bilateral function with no residual contrast medium on either side after two hours. After dismissal from the Hospital the patient was free of symptoms, but prolonged observation is planned in anticipation of further difficulty probably on the unexplored side. Addendum: figure 3 is a follow-up intravenous urogram taken 32 months after surgery. Note the improvement in appearance of the left kidney.

Pathological Report: "Connective tissue fibers with associated fibroblasts, sometimes showing whorl formation. Minimal inflammation or sclerosis."

Discussion: Idiopathic retroperitoneal (periureteral) fibrosis is described in the literature as a gray-white mass of tissue, resembling an undifferentiated tumor with vague boundaries, varying from two to six cm. in thickness, with maximum proliferation usually over the sacral promontory. The mass appears to envelop the retroperitoneal structures, including the great vessels, for a variable distance between the kidneys and the brim of the bony pelvis but rarely exceeds these boundaries. The lateral extent of the mass (or plaque) usually surrounds the ureters but rarely invades them

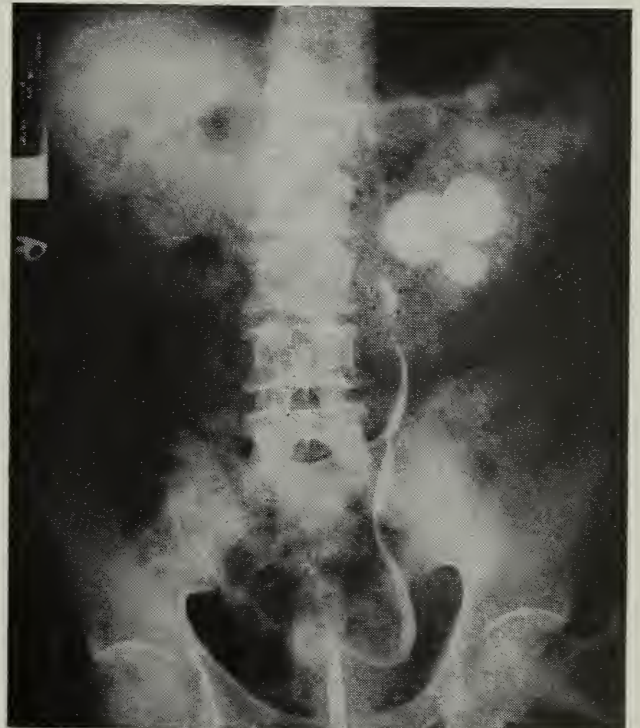


Figure 2: Pre-operative retrograde pyelogram.

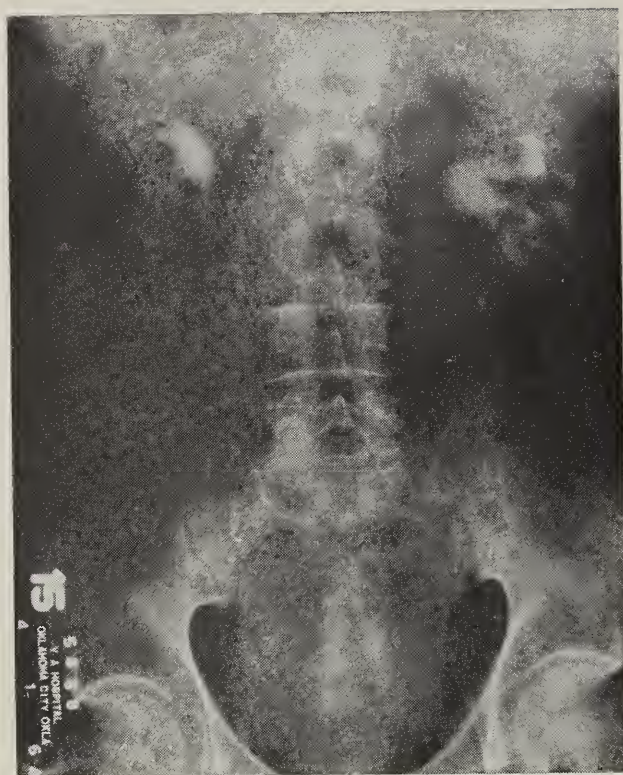


Figure 3. Follow-up intravenous urogram 32 months post-operative.

or any other retroperitoneal structures.

Arteries and nerves are relatively rigid while veins, if compressed, gradually develop collaterals. On the other hand, ureters have minimal rigidity and no collateral pathways so they are more likely to become obstructed first during the course of the disease process. This accounts for the fact that ureteral obstructive symptoms usually appear early in the course of the disease.

Hutch⁵ reports a series of 23 cases collected from the literature and from his own practice. Ormond⁷ reports 95 cases, of which 64 had bilateral ureteral involvement with no evidence of pre-existing renal disease. In the latter group he reports ten deaths and five autopsy findings.

Utilizing the data from these two authors, one is able to arrive at a general outline of the disease:

Symptomatology:

- 1) Symptoms caused by plaque per se
 - A) Low back pain, with or without abdominal pain
- 2) Symptoms caused by obstruction of structures passing through the plaque
 - A) Ureteral obstruction

1. Anuria, if bilateral
2. Kidney pain, usually in one flank only
3. Uremia with nausea, vomiting, weakness and weight loss

- B) Obstruction of the internal spermatic vessels, with testicular pain, or obstruction of the abdominal aorta or inferior vena cava, with edema in the scrotum and lower extremities, or, rarely, involvement of the presacral plexus

- 3 Symptoms caused by adhesions of intra-abdominal organs to the peritoneal surface of the plaque

- A) Intestinal obstruction

- B) Obstruction of the common bile duct with jaundice

The paucity of urinary symptoms is surprising and symptoms of urinary infection are usually absent.

Incidence:

Age: Eight to 70 years, with the mean age of 43. The Caucasian Race predominates. The sex ratio favors the male 3:1.

Physical Examinations:

There is rarely evidence of peritoneal inflammation and the differential diagnosis from acute abdominal disease is readily made. The clinical pattern is usually one of chronic disease. A mass is palpable over the sacral promontory in a few cases.

Laboratory Studies:

Temperature — Usually normal

Hemoglobin — Lower than 11 gm. in two-thirds of the cases

J. M. Ingalls, M.D., who graduated from Duke University School of Medicine in 1958, limits his practice to his specialty, general surgery.

Doctor Ingalls is a member of the candidate group of the American College of Surgeons.

R. C. Emmott, M.D., graduated from the University of Western Ontario Faculty of Medicine in 1945. In addition to his private practice in Bartlesville, Oklahoma, he is Instructor in Urology at the University of Oklahoma School of Medicine.

He is a member of the American Urological Association and the Royal Society of Medicine.

White blood cell count — Normal to slightly elevated

Blood urea nitrogen and creatinine are normal or elevated, depending on the disease state and degree of ureteral obstruction.

Sedimentation Rate — Elevated up to 48-64 mm/hr.

X-Ray Data:

- 1) Medial deviation of the ureter
- 2) Dilatation of the ureter above the area of compression
- 3) Non-visualization of the involved ureteral segment on excretory urography

Pathology:

The pathology process is one of fibrosis, with varying degrees of inflammatory reaction. Most plaques have dense, fibrous, connective tissue, with varying amounts of fat and infiltrating inflammatory cells. Histologic differentiation of this lesion from retroperitoneal sarcoma is difficult.

In the case reported here a definitive, non-malignant diagnosis was reported only after examination of the tissue and consultation with the Armed Forces Institute of Pathology, as well as our area pathologists.

Treatment and Results:

The consensus of opinion is that early nephrostomy drainage is followed by a higher percentage of favorable results. There are several methods of managing ureteral obstruction after freeing the ureters at the time of exploratory surgery:

- 1) Padding with adjacent adipose tissue, thereby elevating the ureter away from the plaque
- 2) Intraperitoneal placement
- 3) Resection of the involved segment, with end-to-end anastomosis. This is rarely possible.
- 4) Suture of the ureter to the peritoneum or psoas muscle in order to remove it from the general area of the plaque

Other measures have been attempted such as irradiation, steroids, and antibiotics. It should be noted that treatment is frequently not successful due to:

- 1) Irreversible renal or vascular damage
- 2) Progression of the fibrotic proliferation
- 3) Recurrence of ureteral obstruction

Pathogenesis:

In each of the cases reported by Hutch and Ormond, both ureters were involved in-

dicating that the fibrotic proliferation extended laterally from the midline far enough to involve both ureters. In spite of the fact that the plaques always included the ureters, it never extended laterally beyond them, as would be expected if the plaque were free to extend unhindered within the retroperitoneal space. One may postulate that the periureteral tissue is shortened or contracts as the plaque is formed, thus pulling the ureter toward the midline and into the lateral edge of the plaque.

Chisholm, Hutch and Bolomey, in 1954, advanced the theory that Gerota's fascia creates a fascial space which encloses the kidneys, both ureters, vena cava and aorta. They felt that the fibrous plaque was due to inflammation of this fascia and the fat within it. The etiology of the inflammation is unknown. They advanced the idea that its origin was lymphatic.

Since this disease entity has been described only since the advent of antibiotics, these drugs have been incriminated in the etiology. Another concept advanced most strongly by Hoffman and Trippel⁴ presents arguments in favor of an allergic hypersensitivity reaction as the cause. It is their feeling that retroperitoneal fibrosis is only part of a generalized vasculitis.

Citing their own cases, as well as work done on the hypersensitivity reaction since the time of Arthus in 1903, Hackett² feels that this hypothesis could explain the changing pulmonary findings which they report. There could even be a relationship to Rich's rheumatic pneumonitis, Wegener's granulomatosis or even more generally, to the concept of pathergy postulated by Fienberg.¹ "Pathergy" in this context connotes "the totality of morbid phenomena which can be produced by a state of altered tissue reactivity."

In their work, the retroperitoneal tissues revealed characteristic fibrosis with perivascular, perineural and periadipose granulomatous reaction. Biopsies of liver, muscle, and kidneys in their patients revealed generalized arteritis. These and other pathologic findings described are "consistent with classical reports of the tissue changes in hyperallergic states." They conclude by saying that "this disease entity may very well be a pathergic response to some as yet

undetermined allergen, either of local bacterial, autogenous tissue or extraneous origin, manifesting itself in the reticuloendothelial tissues of the retroperitoneal cav-
erns."

It is interesting to speculate that a similarity may exist between retroperitoneal fibrosis and chronic mediastinitis, with associated complete obstruction of the superior vena cava, as discussed by Hinshaw and Rutledge.³ To this, Ormond adds the possibility of a common or similar etiology between retroperitoneal fibrosis, Riedel's

stroma, sarcoidosis, Dupuytren's contrac-
ture and Peyronie's disease. □

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CENTRAL CONTROL OF PROFESSIONAL COMMUNICATIONS?

Some pharmaceutical manufacturers are pouring millions of advertising dollars into national commercial publications, completely bypassing the official journals of organized medicine and jeopardizing their existence.

Maybe they think it sells more pills, or that it's cheaper, but they forget their moral obligation to support locally-controlled media of vital interest to the medical profession and, indeed, to the drug industry itself. At a time when drug manufacturers are desperately attempting to maintain the identity and the research and marketing freedom of component, free enterprise companies, their advertising policies are contributing to the central control of medical communications.

If the present decline in national advertising revenue continues, many official med-

ical society publications will fold-up, and a few commercial publications will have even greater responsibility for professional communications. The average doctor and the average medical society may well be silenced.

There's a place for everything in this world—including the excellent commercial medical publications—but not at the expense of centralized control of medical communications.

Ask your detailman about his company's policies. Manufacturers whose products are supported by the faith of practicing physicians should return the faith by immediately restoring advertising support to the locally-controlled official publication of organized medicine.

Radiation Therapy for Carcinoma of the Cervix Uteri

G. RAY RIDINGS, M.D.

*Treatment of cervical carcinoma
should be within a carefully
constructed program which takes
maximum advantage of all known
radiobiological, physical
and oncological principles.*

THE MAJORITY of cases of carcinoma of the uterine cervix are treated by irradiation. Long experience has proved this to be appropriate. Most programs for irradiation of this lesion were developed two or more decades ago in various European radiotherapy centers.¹ Because this history is so pertinent to present concepts, a few highlights will be mentioned.

HISTORICAL

The earliest and perhaps the best known center for irradiation was the Radiumhemmet in Stockholm. It was here that a vast amount of clinical radiology and radiobiology was first formulated.

In Paris in the 1920's, it was shown that treatment results were improved by spreading the irradiation over a period of several weeks (using smaller amounts of radium or repeated small doses of radium or x-ray). By this means larger total doses could be given; tumor destruction was more consistent and at the same time normal tissues remained in better condition.

In the early 1930's medical radiation physics began its development. This was ex-

ploited by a group in Manchester,² England, who developed a system based on the calculated dose in roentgens (gamma roentgens from radium) delivered to certain points in the pelvis; the rate of delivery of the dose was also held important. They felt that the critical point lay in the tissues just lateral to the cervix, because (a) this tissue is more sensitive to irradiation than the cervix (which will tolerate immense doses); and (b) the more lateral tissues receive much less irradiation from radium (figure 1b) due to the fundamental inverse square law, with which we became familiar in high school physics. This paracervical point they arbitrarily established at two cm cephalad and two cm lateral to the cervical os and called it "Point A" (figure 1a). Point B lies three cm lateral to Point A, intended to be in the vicinity of the obturator node against the lateral pelvic wall.

In the United States irradiation of cervical carcinoma has, in the main, been intended as some variation of the Manchester technique. But these programs have varied so in loading, timing, doses and distribution that they have moved quite far from the original (and carefully worked out) radiobiological standards.

Space does not allow discussion of all the individual achievements in this country. Among those that should be listed: Doctor del Regato has, by masterful administration of the external beam, shown its importance, especially in more advanced lesions.³ Doctor R. E. Fricke and associates have for many years used an eight-application, four-week radium schedule with considerable success.⁴ The simple and atraumatic nature of their insertions is commendable. Various special applicators have appeared; some offer ad-

.Work on the paper was done while Doctor Ridings was at the University of Oklahoma Medical Center.

vantages such as added convenience or stability in the insertion.

"Fixed" applicators allow easy calculation of the isodose pattern about the applicator but are much too likely not to fit the patient; opening the applicator in a conical pelvis often causes the radium system to slip down. The symmetry of a low insertion may satisfy an unsuspecting physician but the main radiation pattern may be below the critical tumor area. Also, when attempting to achieve a high dose, experience has shown that an unacceptably high complication rate may follow.

CURRENT CONCEPTS

More recent significant advances have stressed, among other things, utmost precision in measurement and control of dosimetry, not only of the radium but also integration of the radium dose pattern with that of the external (x-ray) beam.⁵ This aims toward elimination of (a) previously poorly understood "hot spots" with their attendant over-dose complications and (b) "cold spots" with persistent tumor—all too often the actual cause of "radioresistant" tumors. It is apparent that statements on tolerance, "radio-resistance," complications, survival rates, etc., have little meaning unless directly related to the irradiation technique employed and then only if there is thorough knowledge of the radiation distribution, dose rates, etc. Only when this is known can any irradiation program be evaluated objectively.

Evaluation of a radiation therapy program cannot be done with only a handful of patients; it requires large numbers of *patients similarly treated*—radiobiologically consistent. Yet in patients with all varieties of pelvic soft tissue configurations and disease distributions, how does one achieve individualization which, at the same time, maintains radiobiologic consistency from patient to patient? There are many complications; *e.g.*, change in any of several factors (such as field size, length or tilt of intrauterine tandem, etc.) which can grossly change the radiation pattern and consequently the tissue effects. No patient actually

matches a "standard" or "idealized" configuration which would fit a "standard" dose table. In fact, in most cases the value of those popularized reference points A and B is grossly compromised, *e.g.*, the tilt of a tandem will do this. As this happens, points A and B lose their correlation with the overall dose pattern (and with the tissue effects). Therefore, the therapist must conceive each dose pattern as a three-dimensional affair (*e.g.*, figure 1 shows only two dimensions; in figure 1b the three-dimensional pattern about the tandem is actually somewhat barrel-shaped). As shown in figures 1b and c, each aspect of the irradiation (intrauterine radium, vaginal radium and external x-ray beam) has its irradiation pattern. These must be fitted together to avoid undue overlapping of high doses ("hot spots") or gaps ("cold spots").

It is apparent that a single, rigid technique of irradiation (*e.g.*, so much radium in a particular applicator for a certain number of hours, plus so much external x-ray) falls far short of the best possible treatment; patients simply don't fit any standard sketch or table.

On the other hand, if each application is an entirely new experience, there can be no consistency from patient to patient, no way of evaluating effects. The answer, of course, is to plan a systematic approach; one in which a series of carefully-calculated dose patterns are set up, with this series covering a wide variety of clinical situations. With this established and with good judgment, a pattern can be selected which nearly fits any patient. Then it is an easy matter to calculate and make the minor accommodations needed for an individual patient. An important step, often omitted, is the re-calculation immediately after the radium is inserted, with this based on the radium localization radiographs and the dose rate measurements made with the probe, answering such questions as: Are there areas of over-dose or under-dose; is the pattern satisfactory, or is a revision needed? With the main patterns established by a widely-applicable system, these smaller individual variations can be accommodated with satisfactory radiobiologic consistency. There is no denying that successful application of such a system requires of the therapist a thorough knowledge

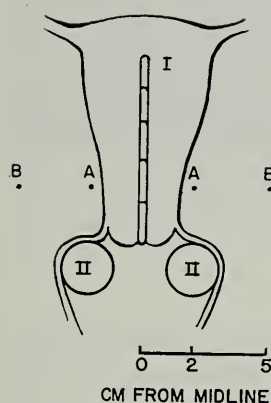


Figure 1a

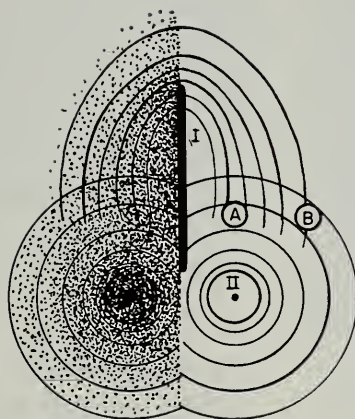


Figure 1b

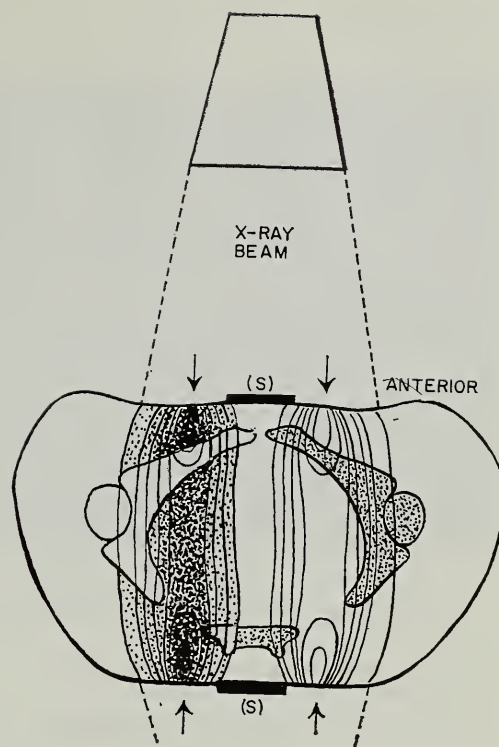


Figure 1c

Figure 1: Relations of irradiation patterns to the pel vis. Note: The final resultant irradiation pattern (not shown) is a combination of 1b and 1c.

1a. (Anterior view) Points A & B and their relation to pelvic parts and to intrauterine radium (I) and vaginal radium (II)

1b. (Anterior view) Dose intensity distribution about intrauterine and vaginal radium. Lines are "isodose lines." Dots represent relative intensity of irradiation.

1c. (Cross section through pelvis). Dose intensity distribution resulting from combined anterior and posterior treatment fields (two mev x-ray), with a central lead shield (thus sparing the tissues most heavily irradiated with radium).

of instruments, radiation physics, radiobiology, anatomy and nature of the disease process. But, of course, these are the requirements of any satisfactory radiation therapy.

The treatment program discussed here contains no radically new feature—except that this particular combination does seem to be unique. This combination was designed to take advantage of the largest number of proven radiobiologic and oncologic principles:

1. Fractionation of radium irradiation (breaking it into multiple small doses over a period of time, instead of a single application).

2. A dose rate which is consistent from patient to patient. An important aspect of this is consistent timing of the radium applications.

3. Combining the external beam and radium patterns into a composite pattern best

suitable to the individual patient's clinical problem.

4. Attaining a high dose of irradiation by strict dosimetric procedures (carefully-aligned radiographs of radium applicators, suitable for detailed measurements and calculations; radiographs of each external field with lead markers in anus and on cervix; careful anatomical measurements of the pelvis in treatment position; with a roentgen ratemeter, measurement in rectum, bladder and vagina of doses from radium and from the x-ray beam).

5. Keeping to a minimum the manipulation of the cancer with its potential dissemination of cancer cells, *e.g.*, avoiding dilatation of the cervical canal.

6. For patient safety and satisfaction, gentleness to local tissues is important. Also, if a general anesthetic is not needed, it is best to avoid it.

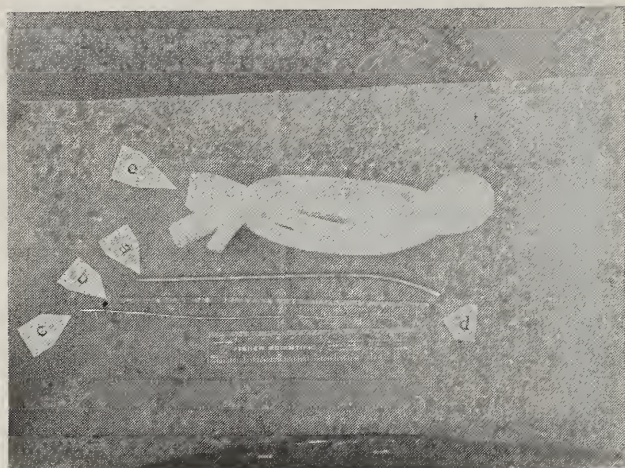


Figure 2. After-loading radium tandem.

- a. Stainless steel tube, 4.0 mm outside diameter
- b. Plastic tubing
- c. Lead stylette
- d. Radium (four 2-cm sources)
- e. Urethane foam for packing vagina.

7. Radiation safety, although a secondary consideration, should be respected.

RADIUM TECHNIC

If it is to be feasible to make multiple radium applications, then the radium application technic must be a simple one. Fortunately, this is possible. In our experience, any cervical canal which will admit a standard silver sound will, just as easily, admit a four mm diameter radium tandem (figure 2). Thus, several advantages accrue, such as avoiding general anesthesia with its hazards and costs, operating room expense, etc.

With the patient in the knee-chest position and without special instruments, the vagina is ballooned by the weight of the intestinal contents; packing in this position is readily accomplished without forceful distention of the vagina—the most efficient way to accomplish this job. Manipulation of the cancer is absolutely minimal. Radium localization films can then be made with great care in the x-ray department. Films of this quality allow exact measurements and computations which are not possible with “portable” or operating room equipment. Also, if films show a need to change position of the radium applicator, this is very simply done. The ease in doing this eliminates the temptation to accept borderline or poor radium applica-

tions, which is certainly present where the insertion is done in an operating room with general anesthesia.

Packing is further facilitated by the use of a new material, polyurethane foam strips. This material is gentle to the vaginal mucosa, not “wiping” it during insertion and withdrawal; likewise it retains its resiliency and so maintains the shape of the packed vagina.

Ordinarily, one problem is the development of penetrating odors in the packing material. Many substances have been tried to suppress this (sulfa, iodoform, etc.). We have found that soaking the packing material in 50 per cent dextrose in water is by far the most effective.

After the hollow, empty metal radium applicator is inserted, checked and approved, the patient is moved to her room. Then in the radium room, taking advantage of its shielding and loading facilities, the appropriate radium sources (determined after the applicator insertion, thus truly fitting the patient's needs) are loaded into a plastic tube. This is taken to the patient's room and inserted into the hollow metal applicator. This “after-loading” technique nearly eliminates radium exposure throughout the insertion, the filming and patient handling, until the patient is in her room. Thus, it practically eliminates the major radiation hazard of the application. There is a further benefit: Elimination of just one more major distraction during the insertion of the applicator; with the applicator not “hot,” the entire attention can be given to the patient.

The radium system can be fitted to practically any patient. For those few who simply won't accommodate a satisfactory intrauterine tandem and vaginal ovoids, other devices in the radiological arma-

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Doctor Ridings holds memberships in the Radiological Society of North America, the American College of Radiology and the American Club of Therapeutic Radiologists.

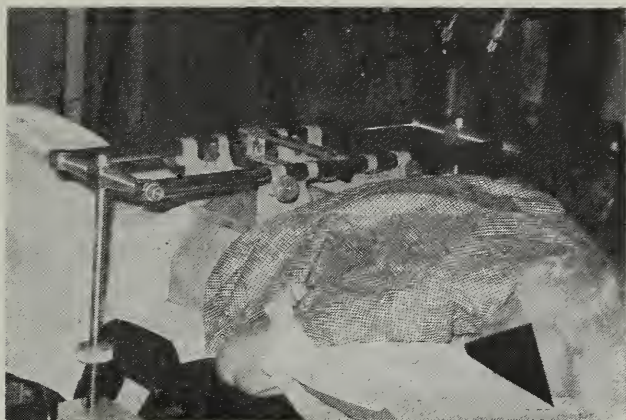


Figure 3. Posterior compression cone. Accommodates two posterior-oblique fields, cross-firing the minor pelvis.

mentarium are available. For some, the transvaginal cone is best; radium needles may deliver the best treatment in others; for still others vaginal radium alone or external beam alone may be best.

Table one shows the treatment "schedules" for various lesions. The full program includes variations, such as for a stump carcinoma, adenocarcinoma, corpus et col- lum, post-partum, carcinoma with preg- nancy, prior total hysterectomy, etc. Space does not allow a full presentation of these schedules.

The amount of radium in the tandem varies according to length, ranging from 70 mgs. (nine cm. length) to 35 mgs. (four cm. length) of radium, arranged to give approximately 55 rads per hour to Point A (exact figures available for each loading) and from 10 to 15 rads to the lateral pelvic wall (increases with tandem length). The vaginal ovoids deliver approxi- mately 25 rads per hour to A, from about ten to 16 rads per hour to the lateral pelvic wall. Thus, the dose and dose rate to Point A are held fairly constant; that to Point B (or the lateral pelvic wall) is dependent on the size of applicators that can be used.

In more advanced lesions there is usually impairment of the radium pattern; its zone of effective irradiation is constricted be- cause there is room only for small appli- cators. When this is significant, external irradiation must be increased to, at first, "make up the difference." In far advanced stages, radium is inadequate for the main job, so the reliance is chiefly on external irradiation. It is here that supervoltage ir-

radiation (two mev, Cobalt 60 equipment, etc.) is distinctly better than intermediate voltage x-ray (200-250 KV). However, much of the Cobalt 60 equipment in use is quite inefficient, some even less so than 250 KV.

In our treatment system, the aim is to deliver approximately 9500 rads to Point A and 5500 to 6000 rads to the lateral pelvic wall, depending somewhat on the stage of the lesion, size of applicators that can be used, etc. To accomplish this, as much as 11,000 milligram hours of radium (plus x-ray) may be used in favorable cases. At the opposite end of the spectrum are those cases in which radium cannot be used at all; in these the aim is for an x-ray dose of 6,000 rads throughout the whole pelvis.

EXTERNAL BEAM (X-RAY) TECHNIC

When delivering high whole-pelvis dose, even small errors in aiming the beam (especially with supervoltage energy) may cause disastrous results within the pelvis. Yet, from day to day, the skin (and thus skin marks) slide about. In order to estab- lish a fixed radiation pattern within the pelvis, a special posterior cone was con- structed (figure three). At the initial "set- ting-up" of the x-ray fields and verification filming, scales engraved on this device are related to points on the bony pelvis. There- after, in each daily treatment, one can be confident of consistent reproduction of the initial pattern.

With the posterior cone, only minor com- pression is gained, although in some patients this is appreciable. However, the anterior compression cone (figure four) is an im- portant aspect of the external beam tech- nique. In past years, compression cones were used with 200-250 KV treatment. With the advent of supervoltage (especially Cobalt 60), it appears that the obvious advantages of compression have been forgotten. Re- duction of the antero-posterior diameter by 4-10 cm. gives a crucially-important gain in tumor dose ratio, whether using medium or supervoltage. Furthermore, compression pushes part of the small bowel out of the beam of irradiation — which is certainly an advantage.

Every x-ray field is checked by radio- graphs with lead markers in the anus and

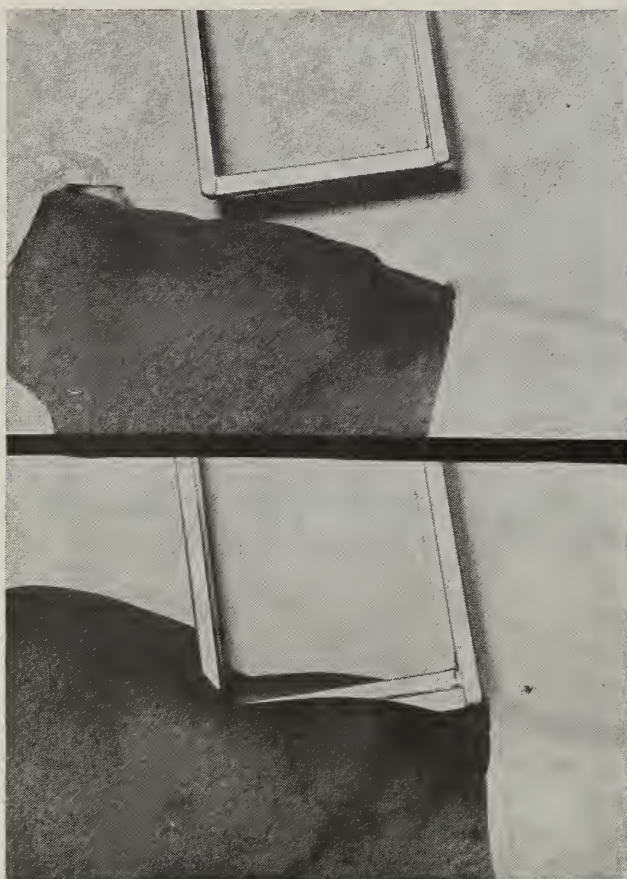


Figure 4. Anterior compression cone. Note the considerable reduction in anterior-posterior diameter with compression. Also, intestinal contents are displaced out of the path of the beam.

on the cervix. These are matched with films of the pelvis with radium applicators in place. This is an essential step in the integration of these two modalities.

A number of field arrangements are used, generally to serve two situations: (a) In earlier stages, the main reliance is on radium. In these cases, external irradiation is limited to the lateral pelvis (Where the dose from radium is small due to the inverse-square effect). (b) In later stages, whole-pelvis external irradiation is the main reliance. In these advanced cases, the x-ray fields are arranged to give a fairly even dose throughout the entire minor pelvis, except for some decrease in the region of the posterior rectal wall. The central pelvis dose is raised some by supplemental radium irradiation.

The dose to the rectum is held below 6500 rads; that to the bladder below 7000 rads. With a posterior lip lesion it is best

Table I				
RADIATION PLAN (SUMMARY):				
Squamous cell carcinoma of the Uterine Cervix				
STAGE I				
Early	Schedule A	Ra: 2x48 Hr,T&O	— (1-4)*	
		PM: 3000-4000 rads	— (1-6)	
Advanced	Schedule B	WP: 2000 rads	— (1-2)	
		Ra: 2x40 Hr,T&O	— (3-6)	
		PM: 1800 rads	— (3-6)	
Massive	Schedule C ₁	WP: to 4000 rads	— (1-4)	
		Ra: 2x32 Hr,T&O	— (5-7)	
STAGE II				
Early (IIA)	Schedule A			
Moderately Advanced (IIA with large cervix)	Schedule B			
Advanced (IIB: almost to pelvic wall; or barrel-shaped corpus).				
a. With initially poor radium geometry, but satisfactory at 4000 rads WP	Schedule C ₁			
b. At 4000 rads WP, if disease still bulky or radium geometry still too poor use:				
	Schedule C ₁			
	or Schedule C ₂	WP: 4000 rads	— (1-4)	
		TV: 5000 rads	— (5-6)	
	or Schedule D ₁	WP: 6000 rads	— (1-6)	
		Ra: 1x48 Hr,T&O	— (6-7)	
	or Schedule D ₂	WP: 6000 rads	— (1-6)	
		TV: 3-3500 rads	— (5-6)	

STAGE III

- IIIA (Mainly central lesion) Schedule C₁
 (To lower ½ of vagina) Schedule C₁ (With vagina cylinder or needles)
 IIIB (To both pelvic walls, frozen pelvis) Schedule D₁ or D₂

STAGE IV

- Potentially Curable Schedule D₁ or D₂ (usually)
 Palliative Individualize

NOTE: *: Bracketed numbers = usual week in which designated treatment is given
 Ra: Radium
 PM: External x-ray limited to parametria
 WP: External x-ray to the whole pelvis
 TV: Transvaginal cone x-ray
 T&O: Intrauterine tandem and vaginal ovoids

to adjust the combined rectal dose to about 5000-5500 rads; if anterior lip, the bladder dose to about 6000 rads.

This level of irradiation can be achieved only by meticulous care and coordination of every phase: locating, fixing and aiming the external beam, with heavy pelvic compression (figure 4); careful placing of the radium; precise packing; checking by use of x-ray films, radiation detection probes, etc.

The goal is to destroy the cancer with minimal danger to normal tissues. However, it is difficult to define "cancerocidal dose," much less measure it. For example: the well-oxygenated cells at the periphery of a neoplasm may be destroyed by only about one-third of the dose necessary to eliminate the avascular central part of the neoplasm. Large neoplasms are relatively "radio-resistant," probably in large part related to poor oxygenation. The irradiation of large lesions is further complicated by the fact that they are more likely to involve large amounts of radio-sensitive normal structures, or at least to make it necessary to expose these structures to high-dose irradiation. These factors, and others, may radically change the "therapeutic ratio," the "curability," the "radio-sensitivity" of the tumor and its "cancerocidal dose."

There have been 70 patients treated according to this program, with follow-up of from three to 19 months since treatment. It is too early to estimate the long term results, but it is worthwhile to note the proportion of favorable early clinical responses and the low rate of complications of treatment. The 70 patients were, by stage: I - 14 patients; II - 25; III - 23; IV - four; post-operative and stump - four. Of these, 46 are living without detected tumor; 18 are living with residual tumor either apparent or proven; one is deceased with cancer; two deceased of intercurrent disease but had no apparent cancer on their last OPD visit; three lost to follow-up. Of the 46 living and well, one had recurrence, underwent definitive surgery and, after six months, is apparently free of disease.

Gastrointestinal complications included: dyspepsia - one; mild diarrhea easily controlled with kaopectate or paregoric - six; moderate diarrhea, controlled with less ease by paregoric - two; diarrhea, lasting two months but eventually controlled - one; mild cramping with or shortly after the course of irradiation - three. Of these, one had a one cm. diameter rectal ulcer which healed with conservative management. Three had mild rectal mucosal reactions which cleared spontaneously.

Urinary complications included: Mild dysuria - five; dysuria, moderately severe

(at the end of treatment for two months, then ceased) - one; complained of urinary bladder catheter - five.

There were four patients with significant temperature elevations, all below 102°. Except for one there was return to normal without modification of treatment. The one initially had a massive cancer with considerable tumor necrosis and developed a large uterus during treatment; she appeared to have parametritis; passage of a sound in the uterus produced no pus; her temperature returned to normal, but she had progressive pelvic disease. There were three patients with temperature elevations of 102° or more. In one of these the radium was withdrawn and her temperature returned to normal; the irradiation was resumed uneventfully. Another patient developed fever, diarrhea and cramping abdominal pain with signs of peritonitis; laparotomy was done; a left tubo-ovarian abscess was found; post-operative convalescence was somewhat slow but otherwise satisfactory; her course of irradiation was resumed and completed satisfactorily. In the third patient, the treatment course was not modified and was completed satisfactorily.

SUMMARY

A treatment program for carcinoma of the uterine cervix is described. Aims of this program include: efficiency in delivery of irradiation to the neoplasm, sparing of normal tissues, combining the external beam and internal irradiation into a complete pattern of high dose irradiation, fractionation of the radium irradiation. Preliminary results are encouraging both in proportion of favorable early clinical responses and in the low number of complications. □

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ABSTRACTS

TRUE HERMAPHRODITISM

The term hermaphrodite comes from the result of the mythological union of Hermes and Aphrodite in which the features of the parents were so mixed that the sex of the child could not be determined. In this paper the authors report a case of true hermaphroditism with a review of the literature.

The patient was a phenotypic female with an enlarged phallus and a urogenital sinus. Internal genitalia consisted of a normal left ovary and rudimentary uterus. There was a right ovotestis in the right labioscrotal fold together with an epididymis and vas deferens. Nuclear sex chromatin was positive (female) and chromosome analysis revealed 46 chromosomes with XX sex chromosomes (female).

Among the collected cases there were 77 phenotypic males, 35 females and two indeterminate. Thirty-five with nuclear sex studies revealed 26 chromatin positive and nine chromatin negative (male) cases. Sixteen cases had chromosome analysis. Of these 12 demonstrated 46 chromosomes with a female karyotype and four manifested mosaicism (XX/XY, two cases; XY/XO, one case; and XX/XY/XO, one case). The authors suggest that other cases of true hermaphrodite might be mosaics and that the male determining Y Chromosome might be responsible for this entity.

EDITOR'S NOTE: The case in itself being quite rare is not of great importance except to the patient having the malformation. The importance of these aberrations of nature lie in what they can teach us about genetics and embryology. The former is an especially moving and fascinating field today.

True Hermaphroditism—Report of a Case and Review of Literature, James A. Merrill, and John E. Ramsey, *Ob. & Gynec.* 22: 505, Oct. 1963.

REGIONAL LYMPH NODE DISSECTION AND MALIGNANT MELANOMA

The extreme variability in the biological behavior of malignant melanomas makes them the most unpredictable of malignancies. In an individual case the outcome frequently bears no predictable relationship to the choice of treatment. Consequently the advisability of regional lymph node dissection in conjunction with wide excision of the primary tumor has been controversial.

The authors reviewed all patients with malignant melanoma primary on an extremity seen at the University of Oklahoma Hospitals between January 1, 1941 and December 31, 1957. Seventy cases were studied. Of these twenty were excluded because of distant metastases (beyond the regional nodes) when first seen. The remaining fifty patients were categorized according to the presence or absence of clinical evidence of involvement of the regional lymph nodes before undergoing extirpative surgery for the primary tumor. Follow-up data were available in all instances.

Twenty-seven patients (54 per cent) had clinical evidence of involvement of the regional lymph nodes.

Two patients refused treatment and died of disseminated melanoma. Twenty-five patients were treated with wide local excision and regional lymph node dissection. Five of these patients survived and are living and well, a survival rate of 20 per cent. Histologically, the involvement of regional nodes was confirmed in twenty-four of the twenty-five patients.

There were twenty-three (46 per cent) who had no clinical evidence of involvement of the regional lymph nodes at the time of excision of their primary tumor. Nine patients underwent wide local excision only, only two of whom have remained well without evidence of recurrence (22 per cent). Fourteen patients had regional lymph node dissection in conjunction with wide excision of their primary tumor. Six of these have survived without evidence of recurrence (46 per cent). Histologically none of the lymph nodes examined in these fourteen patients showed involvement with tumor.

On the basis of this study, it is concluded that removal of the regional lymph nodes in patients with malignant melanoma of an extremity enhances survival by approximately 20 per cent. David D. Snyder, M.D.

Regional Lymph Node Dissection and Malignant Melanoma. William E. Price, M.D. and Merlin K. DuVal, M.D. *Archives of Surgery*, Volume 87, Page 747-750, November, 1963.

RECENT PUBLICATIONS

The *Journal* welcomes the opportunity to list current publications by any Oklahoma physician.

Hydroxyzine in concept identification under induced stress with chronic schizophrenics, Vladimir Pishkin, A. Wolfgang, and F. J. Bradshaw, Jr., *J. Nerv. ment. Dis.*, 137: 322-328, Oct., 1963.

Comparative Study of Attempted Suicides and Psychiatric Outpatients, John G. Bruhm, *British Journal of Preventive and Social Medicine*, 17: 4, October, 1963.

Canine Hemophilia, W. E. Brock, R. G. Buckner, J. W. Hampton, R. M. Bird, and C. E. Wulz, *Arch. Path.* 76126, 1963.

Infection of protoplasts of *Escherichia coli* by bacteriophage X174 treated with specific antibody, B. U. Bowman, Jr., and R. A. Patnode, *Virology* 21: 506-508, 1963.

Specific nuclear reaction pattern of antibody to DNA in lupus erythematosus sera, Salvador P. Casals, George J. Friou, and Perry O. Teague, *Journal of Laboratory and Clinical Medicine*, St. Louis, 62: 625-631, Oct., 1963.

The Current Status of Measles Vaccines. Editorial, Harris D. Riley, *South Med. J.* 56: 1327-1331, Nov., 1963.

Reprints of the above publications are usually available on request from the senior author, c/o Mrs. Joan Campbell, Veterans Administration Hospital, 921 N.E. 13th Street, Oklahoma City, Oklahoma.

Pulmonary Artery Banding

G. RAINEY WILLIAMS, M.D.

Reduction of blood flow to the lungs by surgical constriction of the pulmonary artery may be advisable in three groups of patients. Perhaps the most widely accepted indication is in the infant with a ventricular septal defect and massive left to right intracardiac shunting. Although most infants with a ventricular septal defect are not difficult to manage medically, a small number exhibit poor weight gain, repeated respiratory infections, atelectasis, and require repeated or even continuous hospitalization. When the managing physician feels that the infant may succumb before reaching a size which would permit direct surgical closure of the ventricular septal defect (about 12 pounds), constriction of the pulmonary artery may be considered as a temporary procedure. When the child becomes large enough, definitive closure of the ventricular septal defect and release of the band are planned. The mortality rate for pulmonary artery banding in this group of patients is acceptably low and clinical improvement is consistently good. There have been too few patients in whom the banding has been corrected at the time of definitive operation to permit assessment of the over-all risk. It does seem likely that as pump oxygenator techniques for infants are perfected, fewer patients with ventricular septal defect will come to preliminary pulmonary artery banding.

The second group in which pulmonary artery banding may be considered is infants with forms of congenital heart disease not amenable to corrective treatment by present techniques, but in which the

life-threatening physiologic disturbance is massive pulmonary blood flow. Examples of such defects include single ventricle, truncus arteriosus, and Taussig-Bing complex. When shunting occurs distal to the right AV valve, pulmonary artery banding is a rational form of treatment. The operative mortality in these seriously ill infants is high, but the dramatic improvement which frequently occurs in surviving patients and the hopeless outlook without surgical treatment appear to justify continued investigation of this operative approach.

The third category of patients are those with pulmonary artery hypertension and increased pulmonary vascular resistance. Temporary reduction or damping of pulmonary pressure may allow regression of the existing pulmonary vascular disease. Too little experience has accumulated with this group of patients to comment further at this time. The technique of pulmonary artery banding is simple, but applying it in seriously ill small infants requires careful attention to detail. At operation, a band of teflon cloth, umbilical tape, or similar material is placed about the pulmonary artery and tightened until pulmonary blood flow is sufficiently reduced to produce the desired physiologic result. The end point for banding is either production of a 40-50mm. gradient between the right ventricle and distal pulmonary artery or a reduction of approximately 20 per cent in the distal pulmonary arterial oxygen saturation. The operation is short and at times it is obviously life saving. Continued review of indications and continued study of results will be necessary to assess the final place of this procedure. □

AMA Delegates Duck Dues Increase At 113th Annual Convention

Tobacco and health, human rights, physician-hospital relations, a proposed AMA dues increase, continuing medical education, the cost of medical care, and federal subsidization of prepayment plans and health insurance companies were among the major subjects acted upon by the House of Delegates at the American Medical Association's 113th annual convention held June 21st-25th in San Francisco.

Doctor Donovan F. Ward of Dubuque, Iowa, vice-president of the association, was named president-elect of the association. He will become president at the June, 1965, annual convention in New York City, succeeding Doctor Norman A. Welch of Boston, who was installed at the inaugural ceremony in San Francisco.

The AMA 1964 Distinguished Service Award was won by Doctor Irvine H. Page, director of research of the Cleveland Clinic, for his investigation of cardiac, vascular and renal disease. The AMA Scientific Achievement Award went to Professor Rene Jules Dubos, Ph.D., of the Rockefeller Institute, New York City, and the Joseph Goldberger Award in Clinical Nutrition was presented to Doctor William J. Darby of Vanderbilt University School of Medicine, Nashville.

Final registration figures reached a grand total of 49,437, including 14,229 physicians.

Dues Increase

Doctor Edward R. Annis of Miami, outgoing AMA president, told the special Sunday afternoon opening session that a greater effort is needed in the areas of continuing medical education and health education pro-

grams. He also urged state and county medical associations to bolster their paid executive personnel to help carry out local, state and national projects. Doctor Annis called for an increase in AMA dues (to \$100 annually) and later the House referred the question of a dues increase to the Board of Trustees for study and for a report at the 1964 Clinical Meeting in Miami.

The dues increase request was met with mixed emotions, many of the delegates expressed opinions that top heavy financing of the AMA would stifle the abilities of state and county medical societies to meet their responsibilities and would lead to centralization of organized medicine.

Tobacco and Health

The House approved a strong stand on tobacco and health by calling cigarette smoking "a serious health hazard." This action was taken after the reference committee on Public Health and Occupational Health considered ten resolutions and a Board of Trustees report on the subject and heard considerable testimony.

In adopting a four-point reference committee report, the House said "the American Medical Association is on record and does recognize a significant relationship between cigarette smoking and the incidence of lung cancer and certain other diseases."

It urged that programs be developed to disseminate vital health education material on the hazards of smoking to all age groups through all means of communication. The House also recognized the contribution of the Surgeon General's Committee in its comprehensive report. And it emphasized that a joint committee of

the AMA and the National Education Association already has adopted a resolution urging elementary and secondary schools to include programs on smoking and health in their health education curricula.

Finally, the House said that the delegates and the Board of Trustees "should take great pride in the establishment of the research program on tobacco and health that is being carried out by the AMA Education and Research Foundation."

In adopting the report of the AMA-ERF the House called attention to the following statement:

"The Board of Directors of AMA-ERF and the Board of Trustees of the AMA were clearly aware of the possibility of criticism in accepting this grant (10 million dollars from several tobacco companies). But against that possibility they weighed the potential benefits to the public who will continue to smoke and concluded that the risk was insignificant by comparison. The only hope of minimizing the hazards of smoking lies in research which points to the course that the AMA as well as others must take."

Human Rights

On the major issue of human rights the House declared itself "unalterably opposed to the denial of membership, privileges and responsibilities in county medical societies and state medical associations to any duly licensed physician because of race, color, religion, ethnic affiliation, or national origin."

This action was taken after the reference committee had heard a detailed discussion and had considered four resolutions on the subject.

In addition, the House called "upon all state medical associations, all component societies, and all individual members of the AMA to exert every effort to end every instance in which such equal rights, privileges and responsibilities are denied."

The House also accepted a report from the Board on the liaison committees of the AMA and the National Medical Association. This report re-

viewed the history of the committees and noted that "great progress has been made voluntarily. More progress can reasonably be expected in the immediate future, especially if the committees are permitted to continue on a constructive, cooperative basis. This requires effort, but more importantly, good will and the desire to eliminate problems."

Physician-Hospital Relations

Conclusions and recommendations in a significant and extensive report on physician-hospital relations were adopted by the House. Prepared by the Council on Medical Service's Committee on Medical Facilities, the report stresses "the imperative need for the medical profession to assume responsibility for the quality, continuity, and availability of professional services and for the coordination of these services with the other essential supportive aspects of health care."

The report's recommendations are designed to serve as guidelines for physicians in meeting the problems involved in the changing patterns of care such as: appointment of salaried chiefs of staff; appointment of salaried heads of clinical departments; appointment of salaried directors of medical education; employment of salaried physicians for outpatient and emergency departments; use of salaried physicians to provide care ordinarily provided by interns and residents; and utilization of closed-panel prepayment medical care programs by hospitals.

The report also includes a review of the development of AMA's policy on physician-hospital relations, a study of the relation of policy to actual practice, and an investigation of the factors influencing change — including graduate education, medical finance, expansion of hospital functions and regulation of medical care.

Continuing Medical Education

Authorization was made by the House to establish an AMA-sponsored survey and accreditation pro-

gram in continuing medical education. In the program, attention will be concentrated on institutions and organizations offering courses rather than on individual courses, and appraisal of an institution's or organization's program will be carried out only at its request.

Eventually, approved institutions or organizations will be so designated in the Council's annual lists of "Continuing Education Courses for Physicians," and when all institutions which wish to list their courses have had the opportunity to be considered for approval, only courses of approved institutions and organizations will be included in the annual list. Programs will be surveyed by a Review Committee on Continuing Medical Education.

Cost of Medical Care

A four-volume report of the AMA Commission on the Cost of Medical Care was received by the delegates, and the House concurred with the Board of Trustees that the conclusions and recommendations of the Commission will be studied and a report will be made to the House for its consideration at the 1964 Clinical Convention.

The four volumes include a General Report on factors involved in medical care costs, a full report on "Professional Review Mechanisms," another on "Significant Medical Advances," and one on "Changing Patterns of Hospital Care."

In its report the Board said that the Commission "is aware that its efforts will not result in a magic reduction in the price of medical and hospital services. It does believe, however, that its study has produced a considerable amount of new and relevant information which will serve as a basis for better understanding by the public and the medical profession of this complex subject."

Other Actions

- Delegates reaffirmed the AMA policy favoring federal grants for "bricks and mortar" — funds for

construction and renovation of medical schools, hospitals, related institutions, and mental health centers — but urged that the "advantages and desirability of multiple source financing be kept clearly in mind." The House also was informed by the Board that it is appointing a commission to conduct a broad study of the role of federal support of medical research.

- The House went on record as opposing federal subsidization of prepayment plans and health insurance companies, and it asked for an AMA study of the development of state programs which utilize prepayment plans or health insurance companies in the implementation of state programs of medical aid to the aging under the Kerr-Mills law.

- A proposal to poll all AMA members concerning compulsory Social Security for self-employed physicians was rejected by the House. In addition, the House concurred with the reference committee in opposing polls of the membership on issues of "great or even moderate importance" because the House members express the majority sentiments of their constituents on all questions coming before the House.

- An expanded program on medical ethics was endorsed by the House. The program will be designed to educate physicians and the public on what medical ethics means to them and how medical ethics affects them. The Judicial Council, working with the Board of Trustees, will determine the means by which this expanded program is to be implemented.

- Approval was given to a change in the Bylaws to allow the House to set the hour and day of election of AMA officers at the Annual Convention. This was adopted early in the House session and made it possible to have the nominations on Wednesday afternoon and the elections on Thursday morning.

- A three-point communications program designed to improve the public relations position of the medical profession was endorsed by the House on recommendation of the AMA Com-

mittee on Communications. The program includes a redoubling of efforts by county and state societies, closer liaison with media personnel and prompt information to state societies on AMA news releases and testimony.

- Delegates approved the creation of a Section on Allergy on recommendation of the Board of Trustees.
- A comprehensive inquiry of the causative factors for the sharp increase in syphilis and gonorrhea received favorable consideration and Delegates urged the AMA to "take leadership in educational and research measures designed to control and eliminate syphilis."
- A national conference on areawide planning of hospitals was authorized, to be sponsored under the auspices of the AMA.
- The problems of unwed mothers, illegitimacy and other related matters are to be studied and positive prevention programs developed.
- Delegates supported a position statement on protecting children against physical abuse and called for legislative guidelines to the states relative to legislation on this matter.
- The Board of Trustees was asked to investigate establishment of a wire communications system between AMA headquarters in Chicago and offices of state medical associations.
- A resolution condemning the practice by some hospitals of adopting constitutions which deny staff privileges to physicians not eligible or certified by specialty bodies or societies was referred to the Council on Medical Service.
- The House recommended that the Board of Trustees use the talents of Doctor Edward R. Annis, immediate past-president, and other qualified spokesmen for medicine with appropriate remuneration.

The Committee on Insurance and Prepayment Plans of the Council on Medical Service was requested to consider a revision of simplified health insurance claims forms.

- The Board of Trustees was instructed to approve the establishment of an *ad hoc* study on family practice as proposed by the Council on Medical Education.

Inaugural Ceremony

Doctor Welch, in his inaugural address Tuesday night, said that medicine must be united if it is "to serve the public in the future to the high degree that it has in the past." He stressed that American physicians must be "standing strong and firm with a heart and a conscience tuned to public need, with a respect for the rights and privileges of the individual, and with an abiding faith in our free competitive system of medical practices."

In keeping with Doctor Welch's address, "Unity in Medicine," presidents or their representatives from 29 medical specialty organizations were honored guests at the ceremony.

Speaking at the Wednesday session, Doctor Welch pointed up the growing alliance between medicine and research — an alliance rooted in truth, knowledge and the freedom to search them out. He called these "the greatest assets available for human development and human well-being." Doctor Welch also enumerated the important projects of the AMA in the past year such as mental health, continuing medical education, tobacco and health, and AMA-ERF, the Institute of Biomedical Research.

Election of Officers

In addition to Doctor Ward, the new president-elect, the following officers were named:

Doctor Carlton Wertz of Buffalo, vice-president; Doctor Milford O. Rouse of Dallas, speaker of the House, and Doctor Walter C. Borne-meier of Chicago, vice-speaker.

Doctor Robert C. Long of Louisville was re-elected to the Board of Trustees for a three-year term, and Doctor Alvin J. Ingram of Memphis was elected to a three-year term. Doctor Ingram replaces Doctor R. B. Robins of Camden, Arkansas.

Nominated and elected to the Judicial Council was Doctor Charles C. Smeltzer of Knoxville, Tennessee.

Named to the Council on Medical Education were Doctor William P. Longmire of Los Angeles, and Doctor William A. Sodeman of Philadelphia.

Elected to the Council on Medical Service was Doctor John Rumsey of San Diego, and re-elected was Doctor Willard A. Wright of Williston, North Dakota.

Doctor William A. Hyland of Grand Rapids, Michigan, was re-elected to the Council on Constitution and By-laws. □

OSMA Program Features Twelve Priority Projects

Association president Harlan Thomas, M.D., Tulsa, has developed a schedule of priority projects for the current organizational year. While efforts will be made to actively engage the association in all matters of interest, attention to the following projects will be strongly emphasized:

1. The threat of King-Anderson type legislation must be met with continued, vigorous opposition.
2. The citizenship activities of association members and wives have to be stressed, because failure to do so will directly and adversely affect the future course of medicine and of our nation in general. The association must provide for increased endorsement, and for more widespread individual support of the Oklahoma Medical Political Action Committee (OMPAC).
3. The 1965 state legislature must command priority status, and a more effective network of statewide organization must be developed to assure the profession the representation it deserves on the many legislative proposals which will directly or indirectly affect the profession or the public health.
4. The public image of the profession must be improved, at the state, county and individual levels, because public misunderstanding of the profession's ideals and objectives

is oftentimes the root of major demands for medical reform. The wayward doctor is our responsibility; the cost of medical care is our responsibility to explain and correct when indicated; the image of a profession which is individually and collectively working for the public good is ours to build, nourish and maintain in truth.

5. The rights of physicians and hospitals to realize fair compensation for services performed under the auspices of the Kerr-Mills program must be defended, and better arrangements than present have to be made. At the same time, the association must continue to support the principle of Kerr-Mills; that indigent medical care should be controlled at the state level, based upon established need, and designed for circumstances peculiar to Oklahoma.

6. The increase in unwarranted malpractice claims and judgments must become the subject of an all-out war of education and prevention.

7. The county medical societies and individual members must be better informed regarding the goals and plans of organized medicine, and in the majority of cases, must be encouraged to be more responsive and cooperative.

8. The scientific quality of Oklahoma Medicine must be maintained through postgraduate education.

9. The relationships of the medical profession with other professional and-or ancillary groups must be studied, clarified and resolved to a state of all possible harmony.

10. The renaissance of mental health programming in Oklahoma must be recognized at all levels of medicine, and doctors and medical societies must be encouraged to contribute, constructively, to the realization of better facilities and methods for treating mental illness.

11. The association must develop better rapport with medical education, medical educators, and medical students, and study the present educational system with objectivity rather than emotion, with the ultimate goal of providing the public with the

amount and quality of medical care it expects and deserves.

12. The association must improve its internal efficiency by recodifying the constitution and bylaws, and by modernizing staff and administrative capabilities.

Councils, Committees At Work

To accomplish the many important objectives of the OSMA, Doctor Thomas has announced the formulation of twenty-eight councils and committees involving more than two hundred members of the association.

Organizational meetings of the councils are being held this summer and projects are being assigned to the committees serving under the direction of each council. Beginning in September, when the organizational work of the OSMA gets into full swing, the councils will meet on a bimonthly basis, with the respective committees of each council meeting on alternate months.

"A lot of manpower is needed to effectively discharge the responsibilities of the organization," Doctor Thomas said, "and we are hopeful that council and committee personnel will take their jobs seriously, roll up their sleeves and get right to work. The problems of the association can't be solved by the officers and staff alone, although both groups will contribute immeasurably to the attainment of our objectives.

"Letting George do it is a convenient way out of most assignments," Thomas observed, "but we know that *he* won't and that *we* must." □

OHA To Hold Annual Scientific Session

Three outstanding scientists will be featured Sunday, September 20th, 1964, at the Annual Scientific Session of the Oklahoma Heart Association, at an all-day meeting in the Skirvin Hotel, Oklahoma City.

Planned by the Professional Education Committee of the Oklahoma Heart Association, the meeting has been approved by the American Academy of General Practice for four hours Category II Credit. □

Senior Medical Students Honored

Bruce Lee Evatt, M. D., Wayne, and Richard Allgood, M.D., Altus, received the principal senior honors at the University of Oklahoma School of Medicine commencement June 14th.

Doctor Evatt was presented the L. J. Moorman Award given annually to the graduating senior who has shown the greatest scholarly attitude in medicine.

Doctor Allgood took the Onis George Hazel Memorial Award for the student who most nearly approaches the ideal doctor-patient relationship in his clinical work, and also the Oklahoma City Surgical Society Award to the most outstanding senior in surgery.

Student Research Achievement awards, based on an original investigation and the preparation of a thesis, went to Robert Darryl Fisher, M.D., Ada, and Robert Wuerflein, M.D., Enid. Doctor Fisher's research was in pharmacology and Doctor Wuerflein's in surgery.

The graduates were among 89 who received M.D. degrees in rites at Holmberg Hall on the Norman campus.

Doctor Fisher last fall won the Pfizer Laboratories Medical Scholarship based on high scholastic achievement in all prior medical school studies and the Coyne H. Campbell Award for top scholarship in the third year.

Other honors announced at commencement were: to Judy Williams, M.D., Enid, the American Academy of Dental Medicine certificate of merit for promise in the field of dental medicine; and to Richard Honaker, M.D., Bethany, the Mrs. Eugene Fay Lester Book Award in recognition of consistent effort and dedication as a medical student.

Special awards were presented by Dean Mark R. Everett, retiring Dean and Director of the medical center. □

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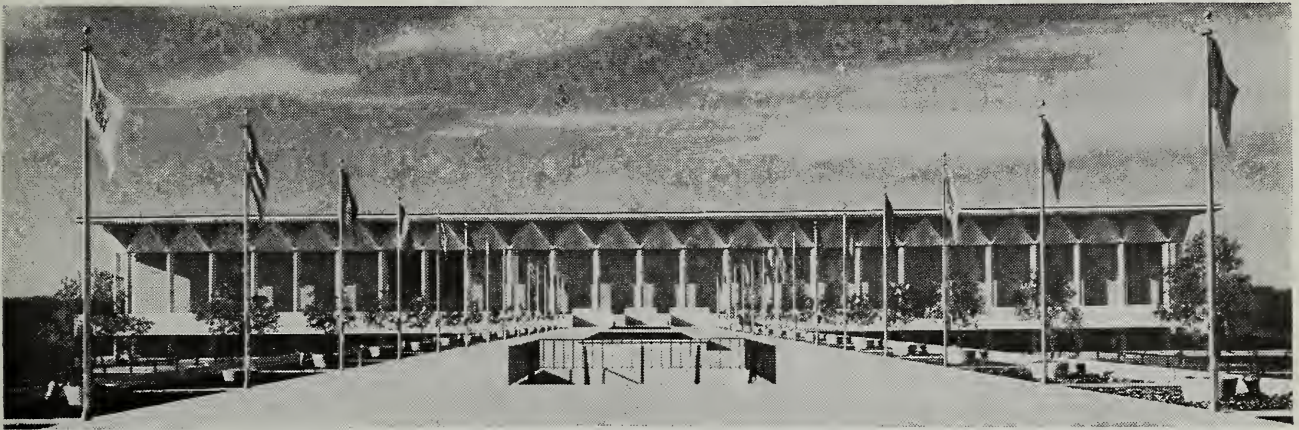
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TULSA ASSEMBLY CENTER PICKED FOR 1965 OSMA ANNUAL MEETING



After a lifetime of making-do with the inadequate convention facilities of the state, the Oklahoma State Medical Association will move major portions of its 1965 annual meeting to the luxurious quarters of the new Tulsa Assembly Center. Dates for the meeting are May 14th, 15th and 16th.

The decision to stage scientific meetings, technical and scientific exhibits, and general sessions of the House of Delegates in the new auditorium was made by the Annual Meeting Planning Committee at a June 8th meeting in Tulsa. The entire annual event had previously been scheduled for the Mayo Hotel.

With the convenient arrangement of meeting room areas in the huge building, it will be possible to hold the exhibit and all major meetings in the same room, by the use of sliding, sound-proof doors.

Plans call for the Board of Trustees to meet at the Mayo Hotel on the afternoon of May 13th, and for House of Delegates sessions at the assembly center on the mornings of May 14th and 15th. During the Delegates' sessions, scientific programming will also be in progress and will continue throughout the afternoons and for a half-day on Sunday, May 16th.

Reference committees of the House will meet Friday evening in the Mayo Hotel.

OSMA's Inaugural Ceremonies will take place at the Mayo Hotel on Saturday night, May 15th, but the planning committee has agreed to drop

the annual dance in favor of an elaborate dinner, perhaps featuring a gourmet or specialty-type menu.

The popular Conference on Medicine and Religion, which drew 400 persons at the 1964 annual meeting, is scheduled for Saturday afternoon. Other annual meeting events in the planning stage include the annual golf tournament, socio-economic lectures and seminars, and a featured program co-sponsored by the Oklaho-

ma Medical Political Action Committee.

Specialty societies and the Oklahoma Academy of General Practice will be asked to assist in the planning and conduct of the scientific program, according to Howard A. Bennett, M.D., planning committee chairman from Tulsa.

Doctor Bennett's committee is comprised of Irwin H. Brown, M.D., Oklahoma City, R. R. Hannas, Jr., M.D., Sentinel, James W. Murphree, M.D., Ponca City, Francis R. First, M.D., Checotah, C. S. Lewis, M.D., Tulsa, and Jerry Sisler, M.D., Tulsa. □

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Medicare Dumped By Ways and Means Group

Another round in the socialized medicine fight came to an end June 24th when the House Ways and Means Committee voted to defer any action on the King-Anderson Bill, H.R. 3920. The vote came on the motion of Representative King, one of the authors of the controversial "Medicare Bill," who said he lacked one vote of getting approval and took the best possible alternative to avoid an adverse vote.

Opponents of H.R. 3920 are now watching the Senate, where it is entirely possible that an attempt will be made to attach social security health care benefits as an amendment to other House passed social security legislation. A similar effort was made in 1962 and was narrowly defeated by a vote of 52-48.

Also side-stepped by the Committee were proposals to bolster the medical association favored Kerr-Mills law. The chairman of the committee, Representative Wilbur Mills, was believed to be sponsoring a beefed-up Kerr-Mills law to further offset the alleged need for social security financed health care.

So, with both efforts thwarted by committee indecision, the health care for the aged issue is still very much alive, and medical leaders are cautioning physicians against being overly enthusiastic about the apparent demise of Medicare.

As a matter of fact, opponents of the measure should continue advising their elected representatives in Washington of their objections to H.R. 3920 or similar measures.

Pay Boost

An election-year raise in social security cash benefits was recommended by the committee in the form of a five per cent across-the-board increase affecting nearly 20 million retired workers, widows and disabled persons.

The increase will be the first general raise since 1958, and it will require that payroll taxes be increased in steps between next January and 1971. In 1971, employers and employees each would be paying a tax rate of 4.8 per cent on the first \$5,800 of wages. At the present time, the rate is 3.625 per cent of the first \$4,800 of income.

Social Security For Doctors?

The Ways and Means Committee also recommended mandatory entry into the social security system for about 150,000 doctors and interns who are presently exempt from participation.

The American Medical Association and the Oklahoma State Medical Association have steadfastly opposed inclusion of physicians under the program. □



First to arrive at an Honoring House for the O.U. M.D. Class of 1964 and their wives and dates, hosted by the O.U. Medical Alumni Association on June 12th at the Faculty House were (right): President and Mrs. Robert W. Lowrey of the Alumni Association and President and Mrs. Harlan Thomas of the Oklahoma State Medical Association.

Trustees To Meet July 26th

A special session of the OSMA Board of Trustees has been called for July 26th at 1:30 p.m. in the association headquarters building, Oklahoma City. The meeting was called by president Thomas, on advice of his Executive Committee, to clear up agenda items requiring Trustees' action.

Among the items to be discussed at the meeting will be the consideration of hiring an additional staff member for OSMA headquarters. This matter resulted from the recent House of Delegates directive for the Board of Trustees to consider the employment of personnel "with specialized talents," and was prompted by outgoing president Joe L. Duer's recommendation that the OSMA consider employing an M.D. as executive vice-president.

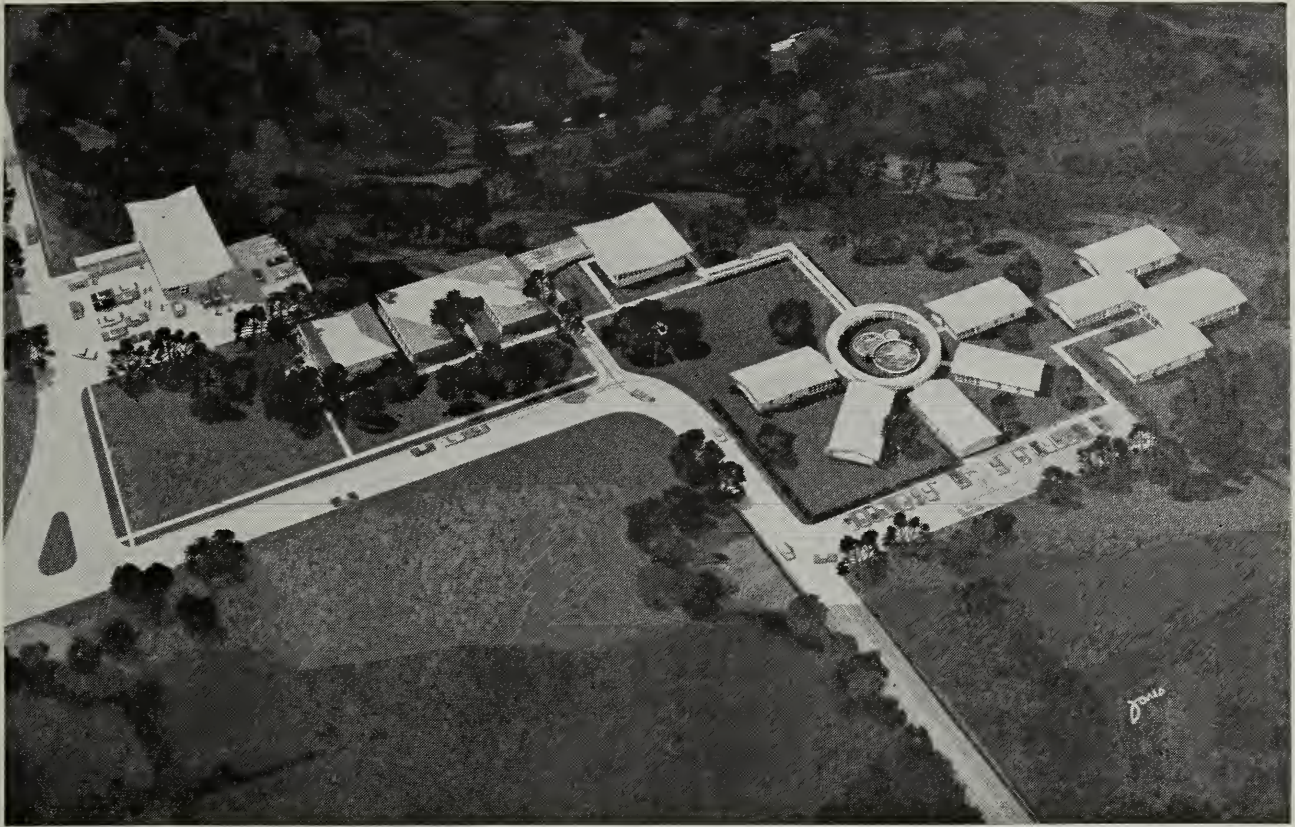
The state of repair of the association's headquarters property will also receive the attention of Trustees. In view of the fact that the

building is now eight years old and has not been fully renovated since its construction, the Executive Committee is recommending certain maintenance projects and improvements to the property. Painting, plastering, and parking lot paving are among the items to be discussed.

Another subject to receive discussion will be ways and means of providing better OSMA support to the Oklahoma Medical Political Action Committee. Although the project has been endorsed in principle by the House of Delegates on several occasions, the association has made no concerted effort to lend the strength of its support to OMPAC, particularly in the area of building physician participation in the activity.

Follow-up action on the House of Delegates' controversial recommendation to convert the operation of Oklahoma's Kerr-Mills program to a system of prepaid health insurance

(Continued on Page 364)



Announcing Move

The Beverly Hills Hospital The Beverly Hills Clinic

(Formerly Beverly Hills Clinic and Sanitarium)

Acute Psychiatric Diagnostic and Treatment Center

☆ New Outpatient and Hospital Facilities ☆ Beautiful New Buildings On a Secluded Scenic and Wooded Site ☆ Open Cottage System and Regulated Intensive Treatment Units ☆ All Established Methods of Diagnosis and Treatment Utilized. ☆

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FE 1-8331

TRUSTEES . . .

(Continued from Page 362)

will be featured at the board meeting. A newspaper account of the Delegates' action during the last annual meeting provoked an unpleasant exchange of news releases between the OSMA and the Department of Public Welfare.

Since the newspaper fracas ended, correction of the financial problems of the Department of Public Welfare has received considerable attention, and the future of the program has been cast in a more optimistic light. The Public Welfare Committee of the OSMA is presently studying the House of Delegates proposal in relation to recent and projected developments, and will make definite recommendations to the Board of Trustees. Meetings have been held with the Director of the Department of Public Welfare, with Blue Cross-Blue Shield officials, and with representa-

tives of the Oklahoma Hospital Association.

Other items on the July 26th agenda include:

Reviewed sponsorship of the "Employ the Handicapped Essay Contest."

Appointment of a physician to the Health Department's Hospital Advisory Council for Licensure, Standards and Regulations.

Resumption of official liaison with the Office of Dependents' Medical Care, for the operation of the health care program in Oklahoma for dependents of servicemen (the OSMA severed relations with O.D.M.C. in 1960).

Consideration of 1965 annual meeting plans, and modification of existing policies.

Approval of the official audit for the 1963-64 fiscal year, and the appointment of a Committee on Appropriations and Auditing.

Consideration of a pre-arranged schedule for Board of Trustees meetings.

Tulsa, Oklahoma County Societies Move To New Headquarters

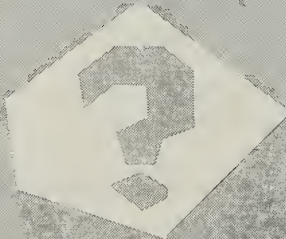
The two major county medical societies of the Oklahoma State Medical Association announced almost simultaneously their plans to move to improved office facilities.

Oklahoma County Medical Society moved on July 15th to a suite in the new Executive Terrace Office Building, 2809 N. W. Expressway, Oklahoma City. The society formerly occupied offices in the Medical Arts Building.

Tulsa County Medical Society plans to move its headquarters to 104 Utica Square Medical Center on August 1st. For many years, the society has been situated in Tulsa's downtown Medical Arts Building.

Only four county medical societies in Oklahoma maintain executive staffs, and only two, Tulsa and Oklahoma Counties, have full-time personnel and society offices. ☐

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District 2: Kay, Noble, Osage, Pawnee, Payne

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Trustee (1966) . . . Alpha L. Johnson, M.D., El Reno
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District 9: Adair, Cherokee, McIntosh, Muskogee, Okmulgee, Sequoyah, Wagoner

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District 11: Atoka, Bryan, Choctaw, Coal, McCurtain, Pushmataha

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Trustee (1966) . . . Henry D. Wolfe, M.D., Hugo

District 12: Carter, Garvin, Johnston, Love, Marshall, Murray, Pontotoc

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Trustee (1967) . . John A. Graham, M.D., Pauls Valley

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Trustee (1965) . . . J. T. Hicks, M.D., Lawton
Trustee (1965) . . . W. R. Cheatwood, M.D., Duncan

District 14: Greer, Harmon, Jackson, Kiowa, Tillman, Washita

Trustee (1966) . . . C. L. Tefertiller, M.D., Altus
Trustee (1966) . . J. B. Tolbert, M.D., Mountain View



THREE JACKSON COUNTY PHYSICIANS HONORED

Honorary Life Membership Certificates were presented to three Jackson County Medical Society members at the regular meeting of the group, held in the Memorial Hospital in Altus, June 1st, 1964.

Pictured above, (left to right) H. N. Bussey, M.D., Altus; E. W. Mabry, M.D., Altus; and J. B. Hollis, M.D., Mangum. At the right C. L. Tefertiller, M.D., Oklahoma State Medical Association Trustee,

(pictured left) is shown presenting Doctor Hollis with his certificate. □



Blue Shield Starts "Merit Rating" July 1st

A new "Merit Rating" system, under which the familiar term "careful use" takes on considerable more importance to the individual patient, has been put into effect by the Oklahoma Blue Cross and Blue Shield Plans.

Incorporating suggestions which have been made by physicians from time to time, the new rating method was adopted by the Oklahoma Blue Cross and Blue Shield Plans after many months of study and research. It was implemented July 1st, replacing the County Rating program which has been in effect since 1958.

Under Merit Rating, the responsibility for careful use of Blue Cross and Blue Shield benefits is focussed more sharply on both employee

group and non-group members of the Plans. The new system provides that members' dues will be more directly related to the individual use of benefits.

In announcing the transition to Merit Rating, N. D. Helland, president of the Plans, said the new program is designed to bring an awareness to members of the factors which have an effect on their dues and, thus, encourage wiser use of their Blue Cross and Blue Shield coverage.

"It is based on a sound concept," he added. "Those who use more benefits will pay more in dues. Those who use less will pay less."

Employee groups now are rated more on their own experience, but continue to participate to some ex-

tent in the program of the total statewide community.

"Rates of some groups will be increased, some will remain the same, and others may be lowered," Helland said. "It will all depend on the amount of benefits used."

Impetus for the new rating system, it was pointed out, came from groups who wanted to continue community service through Blue Cross and Blue Shield, but wanted group rates to be more directly related to the use of benefits by their own employees.

"As a result of the change to Merit Rating," Helland concluded, "Blue Cross and Blue Shield will provide the best possible prepaid health program at the rate of dues earned by members." □

OSMA To Host Regional AMA Conference on Aging

On October 15th-16th, 1964, the American Medical Association will conduct a six-state regional Conference on Aging and Long-Term Care in Oklahoma City's Skirvin Hotel, co-sponsored by the Oklahoma State Medical Association's Council on Public Health.

According to Hayden H. Donahue, M.D., Norman, Chairman of the OSMA's Council, the purpose of the conference is to explore new needs and report on new developments in the subject areas. Discussions will center on action to enrich living among older people — in employment, health maintenance, adult education, service to the community, and preparation for later years.

Also, new approaches in facilities and progress for long-term patients of all ages will be emphasized, including the coordination of services to meet individual needs, rehabilitation and financing of care.

The conference is expected to draw 1,000 registrants from health and welfare agencies, professions, agriculture, business, labor, churches,

schools, women's organizations, service clubs, retired persons groups, and communications media.

Members of the Oklahoma State Medical Association will be strongly urged to attend the meeting, Donahue said, since professional representation is essential when discussing matters of health in relation to social and economic considerations.

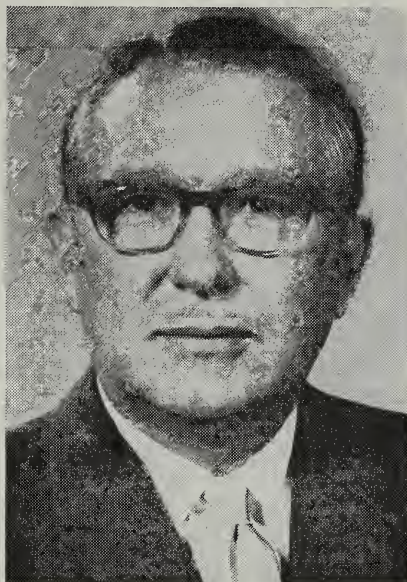
Participants will be provided with authoritative information on new developments in aging and long-term care along with appropriate literature. Ample opportunity will be found for group discussion.

The conference is under the direction of the Department of Community Health and Health Education, a component of the AMA's Division of Environmental Medicine and Medical Services. It is one of a series of such regional meetings being held by the AMA throughout the nation.

A post-conference meeting is planned for Friday afternoon, October 16th between the AMA Committee on Aging and chairmen of the state and county medical society committees on aging to exchange information and ideas regarding effective programs at the local level.

Frederick C. Swartz, M.D., Lansing, Michigan, is Chairman of the AMA Committee on Aging. □

Dennis To Head OU Medical School



A 1940 graduate of the University of Oklahoma School of Medicine will return September 1st to head the school and the Medical Center.

Appointment of James L. Dennis, M.D., 50, professor of pediatrics and associate dean (clinical affairs) at the University of Arkansas Medical Center, was announced by OU President George L. Cross at medical school commencement.

His acceptance ended a seven-month search for a successor to Mark R. Everett, Ph.D., D.Sc., who became dean emeritus July 1st.

Serving as interim dean and director is Joseph M. White, Jr., M.D., associate dean in charge of special training and research programs and professor and head of the Department of Anesthesiology.

"I am pleased that we have been able to secure the services of Doctor Dennis as dean of the Medical School and director of the Medical Center," President Cross said. "His experience and skill as a practitioner and teacher have gained national recognition for him. He is superbly equipped to administer the Medical School program and coordinate the activities of the Medical Center."

The new dean has been a general practitioner, a specialist in pediatrics and a teacher since he was graduated from medical school. He was president and the outstanding member of his graduating class.

After internship and residency as a general practitioner, Doctor Dennis served in the navy and returned from war-time duty to go into private practice at Merced, California.

He later took a residency in pediatrics at the University of Texas Medical Branch, Galveston, and stayed on as an assistant professor during 1953.

Doctor Dennis returned to California and established private practice in Oakland. He then was director of education at Children's Hospital of the East Bay, Oakland, for one year and medical director for six years before resigning to go to Arkansas in 1962.

Doctor Dennis is an official examiner of the American Board of Pediatrics. He is secretary of AMA's Section on Pediatrics, member of the American Public Health Association's *ad hoc* study committee on maternal and child care, liaison representative for the American Academy of Pediatrics to the American Legion Child Welfare Committee, and on the editorial boards of Postgraduate Medicine and GP.

Among his society memberships are the southern and western societies for pediatric research, the American Association for Ambulatory

DEATHS

RALPH E. JONES, M.D.
1883-1964

Ralph E. Jones, M.D., 80-year-old, former Oklahoma physician, died in Gardner, Kansas, June 3rd, 1964.

Doctor Jones was born near Belle, Missouri in 1883 and received his medical degree from St. Louis College of Physicians and Surgeons in 1905. His practice, which was centered around Oklahoma City for 55 years, was uninterrupted except for his service with the medical corps during World War I and his tenure with the medical staff at Tinker Air Force Base Hospital during World War II.

Doctor Jones had lived in the Gardner community for the past 18 months.

HARRY H. HUDSON, M.D.
1890-1964

A 74-year-old Enid physician, Harry H. Hudson, M.D., died in Oklahoma City, May 21st, 1964.

Born in Lincoln, Illinois February 27th, 1890, Doctor Hudson received his medical degree from Northwestern University School of Medicine in 1913. In 1916, he established his practice in Newton, Kansas. After serving with the medical corps during World War I, he moved to Billings, Oklahoma. Five years later, he moved to Enid where he remained in active practice until the time of his death.

Doctor Hudson was a member of the Phi Rho Sigma.

Pediatric Services, the Cystic Fibrosis Research Club, the New York Academy of Science, the American Association for the Advancement of Science, the American Academy of Pediatrics (life member), the Society for Emotionally Disturbed and Retarded Children, the Association of American Medical Colleges and the California Academy of Medicine.

Doctor Dennis is married and has three children. A native of Oklahoma City, he received his premedical education at Central State College, Edmond. □

Graduates Receive Intern Appointments

Eighty-nine men and women were graduated from the University of Oklahoma School of Medicine Sunday, June 14th.

Doctor of Medicine degrees were conferred by Doctor George L. Cross, OU president, and Dean Mark R. Everett in ceremonies at 2:30 p.m., in Holmberg Hall on the Norman campus.

The new physicians have completed four years study at the OU Medical Center in Oklahoma City.

Graduates, listed by hometown, and the hospitals in which they have received internship appointments are:

ADA—Robert Darryl Fisher, Johns Hopkins, Baltimore, Maryland; Rosalie A. LaVon, Fresno County General, Fresno, California; Don I. Scott, St. Johns, Tulsa.

ALTUS—Richard J. Allgood, University of Oklahoma Hospitals, Oklahoma City; Alva B. Clevenger, Riverside, Newport News, Virginia.

APACHE—Paul E. Massad, Wesley, Wichita, Kansas.

ARDMORE—Earl J. Schoolar Jr., John Peter Smith, Fort Worth, Texas.

BARTLESVILLE—Harold E. Boggs Jr., U.S. Air Force, Fort Worth, Texas; David W. Brown, Kansas City General, Kansas City, Missouri.

BELOIT, Wis.—Audrey J. McMaster, Mercy, Oklahoma City.

BETHANY—Richard E. Honaker, St. Anthony, Oklahoma City.

BIG SPRING, Texas—Paul W. Hathaway, Duke, Durham, North Carolina.

BLACKWELL—Charles R. Hahn, Good Samaritan, Phoenix, Arizona.

CARNEGIE—Malcolm E. Bridwell, St. Louis City Hospital, St. Louis, Missouri.

CASPER, Wyo.—Charles E. Prather, Good Samaritan, Portland, Oregon.

CHECOTAH—Dillis L. Hart, St. Francis, Wichita, Kansas.

CLINTON—Buffington B. Burtis Jr., Denver General, Denver, Colorado.

COYLE—Tim K. Smalley, Oklahoma City VA.

CRESCENT—John E. Poarch, U.S. Public Health Service, San Francisco.

DEL CITY—John A. Lung, Fitzsimons General, Denver, Colorado.

DUKE—Noble L. Ballard, St. Anthony, Oklahoma City.

DUNCAN—James S. Jones, St. Anthony, Oklahoma City.

EDMOND—Henry J. Pearce, Mercy, Oklahoma City.

ELMWOOD—Ralph Cramer, Jr., St. Anthony, Oklahoma City.

EL RENO—Gordon K. Jimerson, St. Johns, Tulsa.

ELK CITY—James G. Williams, Emory University—VA, Atlanta, Georgia.

ENID—Henry D. Lagan, Wesley, Wichita, Kansas; Leonard O. Pendergraft, Presbyterian, Oklahoma City; Thomas E. Talley, Strong Memorial, Rochester, New York; Robert Victor Tate, Good Samaritan, Phoenix, Arizona; Judy D. Williams, Bernalillo County, Albuquerque, New Mexico; Robert D. Wuerflein, Palo Alto—Stanford Hospital Center, Palo Alto, California.

GEARY—Daniel R. Stough, St. Anthony, Oklahoma City.

GUYMON—David L. Trent, Denver General, Denver, Colorado.

HARDTNER, Kan.—Jimmy B. Wallace, Presbyterian, Oklahoma City.

HENRYETTA—William D. Hawley, University of Oklahoma Hospitals, Oklahoma City; Delmer Don Kennedy, Mercy, Baltimore, Maryland.

HOBART—Stephen E. Blackwelder, Presbyterian, Oklahoma City.

HOLLIS—Robert P. Metcalf, Mercy, Oklahoma City.

KREMLIN—Joel K. Gist, St. Johns, Tulsa.

MAIZE, Kan.—John A. Mohr, St. Josephs, Wichita, Kansas.

MANGUM—West A. Clabaugh, Wesley, Wichita, Kansas.

MIAMI, Okla.—John A. Cone, Presbyterian, Oklahoma City.

MILBURN—Herbert Rowland, St. Josephs, Wichita, Kansas.

MINNEAPOLIS, Minn.—Eric J. Sorenson, University of Virginia, Charlottesville, Virginia.

MOORELAND—William R. Hanna, University of Oklahoma Hospitals, Oklahoma City.

MUSKOGEE—Hollis K. Leathers, Santa Clara, San Jose, California.

NASHOBA—Thomas M. Donica, Mercy, Oklahoma City.

NINNEKAH—Earl D. Baxter, U.S. Naval, Chelsea, Massachusetts.

NEW YORK CITY—Walter S. Stullman, Syracuse Medical Center, Syracuse, New York.

OKEENE—Bruce A. Naylor, U.S. Naval, Oakland, California.

OKLAHOMA CITY—John R. Afinowicz, U.S. Naval, Chelsea, Massachusetts; Turner E. Bynum, Mercy, Oklahoma City; Joseph Duffy, Cincinnati General, Cincinnati, Ohio; C. Leroy Goodman, St. Johns, Tulsa; Joe T. Hartzog, Duke, Durham, North Carolina; Larry W. Hill, U.S. Naval, Portsmouth, Virginia; Jack B. Howard, Good Samaritan, Phoenix, Arizona; George H. Hulsey, Mercy, Oklahoma City; William L. Jobe, University of California affiliated hospitals, Los Angeles; Lyda L. Long, Oklahoma City VA; John T. O'Neal, Cincinnati General, Cincinnati, Ohio; Edward G. Reichelt, Presbyterian, Oklahoma City.

OKMULGEE—Richard A. McKinne, Kansas City General, Kansas City, Missouri.

PANAMA, Okla.—Robert D. Val-
lion, Oklahoma City VA.

PAWNEE—Larry W. Cartmell,
Mercy, Oklahoma City.

PONCA CITY—Robert A. Taylor,
St. Johns, Tulsa; William L. Ed-
wards, Kansas City General, Kansas
City, Missouri.

POTEAU—James H. Covey, U.S.
Naval, Charleston, South Carolina.

PURCELL—William C. McCurdy,
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Oklahoma City.

SHAWNEE—Mary L. M. Brown,
Oklahoma City VA; Bill B. Crowell,
U.S. Naval, Great Lakes, Illinois;
Billy H. Stout, University of Okla-
homa Hospitals, Oklahoma City; Don
D. Sullivan, Good Samaritan, Phoe-
nix, Arizona; James W. Young, Wes-
ley, Wichita, Kansas.

STIGLER—Philip W. Head, St.
Josephs, Wichita, Kansas.

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Harvey, St. Francis, Wichita, Kansas.

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Mulholland, St. Johns, Tulsa; David
A. Spencer, Kansas City General,
Kansas City, Missouri; Dale I. Webb,
Syracuse Medical Center, Syracuse,
New York.

WAYNE—Bruce L. Evatt, Johns
Hopkins, Baltimore, Maryland.

WOODWARD—Ronald R. Sheets,
St. Francis, Wichita, Kansas. □

Three Department Heads Appointed at OU

Three new department heads as-
sumed duties at the University of
Oklahoma Medical Center during
the summer.

They are: James B. Snow, Jr.,
M.D., first full-time head of the

Department of Otorhinolaryngology;
Marvin R. Shetlar, Ph.D., chairman
of the Department of Biochemistry,
and Mark Allen Everett, M.D.,
chairman of the Department of
Dermatology.

Ethan A. Walker, Jr., M.D., as-
sociate professor of otorhinolaryn-
gology, has served as chairman of
the otorhinolaryngology department
on a part-time basis the past two
years. The new department head is
a 1956 graduate of Harvard Medical
School. Doctor Snow took his resi-
dency at the Massachusetts Eye and
Ear Infirmary, Boston, and joined
the Oklahoma faculty in 1962.

Doctor Shetlar succeeds the re-
tiring dean and director, Mark R.
Everett, Ph.D., D.Sc., as biochem-
istry chairman. The dean emeritus
was chairman of the department for
27 years. Doctor Shetlar took his
Ph.D. in biochemistry at Ohio State
University, came to the medical
school as a research fellow and was
appointed to the faculty in 1948.

Doctor Mark Allen Everett suc-
ceeds Phyllis E. Jones, M.D., clini-
cal professor, also of the part-time
faculty, to the dermatology chair-
manship. Doctor Everett was grad-
uated from the OU medical school
in 1951 and named to the faculty in
1957. He served his residency in
dermatology at the University of
Michigan Hospitals. □

Bishop Named Associate Professor

David William Bishop, M.D., a
1958 graduate of the University of
Oklahoma School of Medicine, has
returned to the OU Medical Center
as the only ophthalmologist on the
full-time faculty. He was appointed
associate professor.

Doctor Bishop interned at Salt
Lake City, Utah, and took his resi-
dency training at the University of
Texas Medical Branch, Galveston.
He later studied ophthalmic plastic
surgery with Wendell L. Hughes,
M.D., in Long Island, N.Y., and
Alston Callahan, M.D., Birming-
ham, Ala. □

Miscellaneous Advertisements

EXCELLENT opportunity for one
or two general practitioners to buy
or lease complete new office and
equipment, including x-ray. Clinic
located in Barnsdall, Oklahoma, with
established practice of five years
with far above average gross and
net. Collection of 95 per cent of ac-
counts. One other M.D. established
here, age about 75, without facilities.
Also, lovely two-story home just
renovated for extreme comfort and
beauty. Contact Ed A. Brashear,
M.D., 511 West Main, Barnsdall,
Oklahoma.

GENERAL surgeon to take over
long-established practice in Okla-
homa town of 10,000 people. Lab-
oratory and office equipment for
sale or lease. Contact Key R, The
Journal, Oklahoma State Medical
Association, P.O. Box 18696, Okla-
homa City.

GRADUATE of the University of
Nebraska School of Medicine, now
completing third-year residency in
dermatology, wishes location in Okla-
homa. Contact Orval P. Nesselbush,
M.D., 3053 South 83rd Street, Mil-
waukee, Wisconsin.

BOARD QUALIFIED surgeon, who
would also like to do general prac-
tice, needed to join established group
of general practitioners in an ex-
panding city of 25,000; new 70 bed
general hospital with complete sur-
gical facilities will be completed by
July, 1964. This group takes advan-
tage of group practice, but each phy-
sician is independent, as far as his
office and financial affairs are con-
cerned. Further details furnished on
request, please send complete resume
with your request. Write Key D, The
Journal, Oklahoma State Medical As-
sociation, P.O. Box 18696, Oklahoma
City.

(Continued on Page 370)

FOR RENT or lease, 4609 North Classen Blvd., Oklahoma City, 2,417 square feet, ultra modern, ultra spacious physician's office, including large reception room, secretarial office, two private offices, three examining rooms, laboratory, x-ray and dark room and fallout shelter; generous parking (approximately 5,000 square feet), ample air conditioning and heating. Call Mrs. Paul WI 2-7760 or Clyde H. Hale, Jr., CE 2-7128.

GENERAL practice established ten years; grosses over \$70,000.00 per year. Building leased, complete office, laboratory and x-ray equipment. Liberal terms. Leaving to specialize, will stay to introduce until December. Contact Key T, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

FOR RENT: Three-room air-conditioned suite in clinic with two general practitioners and a prescription shop. Mrs. L. C. Northrup, 1828 East 32nd Place, Tulsa, Oklahoma.

PHYSICIAN needed for Locum Tenens, Tulsa, August 8th-23rd. Pediatrician or general practitioner will fill the bill. Write Key H, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

WANTED: G.P. to take over well-established practice in southern Oklahoma town, 25,000 population. Large drawing area. Equipment for lease-purchase or will make other arrangements. Offices consist of reception room, x-ray, two examining rooms, two bedrooms, laboratory and office. Contact Key J, The Journal, Oklahoma State Medical Association, P. O. Box 18696, Oklahoma City.

DOCTOR'S WIDOW must sell home. Three bedrooms, living room, dining room, clubroom, two baths and large utility room. Accessible to all schools. Corner lot, northwest area, Oklahoma City. Contact Key F. The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

OPENING for board certified or eligible surgeon, and ophthalmologist in well-established medical clinic. Salary open, plus profit-sharing income. Contact Hansford Counts, 163 Herring, Elk City, Oklahoma, CA-5-1139.

WANTED: Young man desiring general practice in a group of eight men, four of whom are board certified. Starting salary \$1,300 plus percentage per month. Growing agricultural town in Texas Panhandle. Contact C. E. Rush, 309 Lawton, Hereford, Texas.

GENERAL PRACTITIONER NEEDED. Share office space in new clinic, Sulphur, Oklahoma. No partnership necessary. Good income assured from start, no objection to surgical practice. New county-owned Arbuckle Memorial Hospital will be enlarged to 60 beds by July 1st. City has 5-6,000 population and needs additional doctors. Home of national park attracting one million visitors annually. Contact R. W. Lewis, M.D., 1901 W. Broadway, Sulphur. Telephone 135.

LOCUM TENENS needed for two or three months, beginning July 15th. Would like to accept a call for mission service during this period and need a G.P. to look after my practice. Offer includes comfortable home and office, both rent-free, plus all net proceeds from the practice. Contact A. C. Hirshfield, 908 N.E. 50th, Oklahoma City 5, Oklahoma.

OPENING IN general practice group, interest in surgery especially desirable. East central Oklahoma community of 10,000 with drawing area of 20,000. Contact Key C, The Journal of the Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

FOR SALE: X-Ray Patrician 200 MA with all accessories except motor drive. Attractive, well cared for, and efficient machine, two years old. Discount of 50 per cent off 1961 price. \$1,000 down, will finance balance, including installation, if desired. Contact Key A, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

RADIOLOGIST needed for private hospital group, in an expanding city of 25,000; new 70 bed general hospital will be ready for occupancy July, 1964; guaranteed salary, if desired, plus commission or other arrangements can be worked out; a very good opportunity for the right person. The individual will have the opportunity to do private office practice in his field of radiology, including therapy if he desires. Write Key E, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

SUBLEASE medical office one year, 735 square feet, desirable location in Tulsa, modest rent, available approximately June 15. Contact Key B, The Journal of the Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

SOUTH OKLAHOMA City's first Medical Center needs pediatrician, internist, dermatologist and urologist for independent practice with presently established nucleus of six other specialists and close affiliation with family clinic of three G.P.'s doing volume practice. New specialties building in center will be only three minutes from new hospital now under construction. Call SWift 4-2246 after 9:00 p.m.

IDEAL opening for young doctor in well established medical clinic, sharing reception room and equipment with three other doctors. Wonderful location on North May Avenue, Oklahoma City. Contact Frank D. Thompson, 3115 N. Pennsylvania, Oklahoma City, JA 5-5700 or JA 4-9552.

When our president, Mrs. J. Ferrell York, was inaugurated she made known her theme for this year. She announced that much time would be spent "Preserving Our Medical Legacy." She asked that each county organization use its historian's scrapbooks, secretary's minutes, president's annual reports and year books to compile a complete history of their group's activities and accomplishments. In record time the Tulsa County History was received. This book, prepared by the 1963-64 historian, Mrs. Robert E. Dillman, is complete and very artistic.

According to Mrs. Dillman's records the Tulsa group of physician's wives became an auxiliary to the Tulsa County Medical Society in 1931. Its guiding light and first president was Mrs. Hugh C. Graham. Seventeen of the original fifty-four charter members are still in the Tulsa organization. From the very beginning, the interest of the group was directed toward helping others. Work was done every year making supplies for the charity wards of Morningside, St. Johns, and Flower hospitals and infant and maternity supplies for the Salvation Army Maternity Home. During its second year the Tulsa group took on the sponsorship of the Hourly Nursing Project of district nurses. By its fourth year the group had established a precedent of sending scrapbooks and toys to needy children in Tulsa hospitals. This same year a circulating library for convalescents in St. Johns Hospital was established and a reading hour for children patients in Morningside Hospital was started. They were assisted in collecting material by the Boy Scouts.

By 1935 the membership had grown to ninety-two. A major activity of that year was a three day rummage sale at which

sixty-five dollars was cleared. These funds provided for the beginning of the Pure Milk Fund for undernourished babies in Tulsa. This was also the year that Tulsa's own Mrs. Roberta Campbell Lawson became president of the National Federation of Women's Clubs.

From its beginning the aim of the Tulsa group was for Better Health Education and in 1937 all the programs were planned about this theme. A "Good Health" poster contest in the Public Schools was sponsored by the Auxiliary with subscriptions to Hygeia Magazine going to the winner.

Tulsa had its first Doctor's Day observance on March 30, 1938. The theme was an old fashioned box supper.

By 1939 the membership had reached 143 and a representative was appointed to the Women's Committee of the new Philbrook Museum. A major step was taken toward assisting the County Medical Society by purchasing a diathermy machine for its use in the County Clinic. The Auxiliary continued to give its time and gifts helping the needy children of Tulsa. They gave books and toys to the children in Tulsa's three hospitals and assisted the Maternal Health League, the Community Fund and the Red Cross.

With 1941 came the war and the extra activities of Auxiliary members in their efforts to do their part. Many members followed their husbands to various army posts and did what they could to "Tighten up the Home Front." All members engaged in some sort of war effort as many hundreds of hours' work were accumulated in sewing, knitting, bandages, and work on rationing boards.

Next month Tulsa county's post-war record will be related. □

Drug manufacturers are required to submit proof of effectiveness of drugs cleared by the Food and Drug Administration between 1938 and June 20th, 1963, and still on the market. The new, retroactive regulation was the most controversial of a group of regulations issued under the Kefauver-Harris Act amendments enacted into law in 1962. In protesting the regulation, the Pharmaceutical Manufacturers Association said it would comprise "such sweeping requests for information as to be unreasonably burdensome on the industry . . . and ultimately on the Food and Drug Administration."

The FDA said the Congress, in passing the drug amendments, specifically made it the agency's duty to review all medical claims for "new-drugs" cleared in the past on safety alone, "with the intention that any claim unsupported by substantial medical evidence should be discontinued after next October.

The nation's birth rate has declined for the past two years, according to the Public Health Service, but a reversal in the trend is anticipated. There were 49,000 fewer births in 1964 than in 1963. However, an increase in marriages in March — to a total of 109,000, — was seen as an indication of more births ahead. Also, an increasing number of women are entering the child-bearing ages.

Calorie intake requirements have been cut by the National Academy of Sciences. Whereas a 25-year-old "moderately active" male weighing 145 pounds was formerly recommended an intake of 3,000 calories daily, the requirements are now stated as 2,900 calories. For a 25-year-old, "moderately active" female, a 2,100 calorie count is recommended as opposed to 2,300 calories previously.

Blue Cross-Blue Shield's "Test of Performance Survey" is now underway in Oklahoma. The Blues are trying to measure the adequacy of their coverages by sending ques-

tionnaires to physicians and patients on a random sampling basis. Doctors are being asked to reveal their actual charges as compared to Blue Shield payments, and to state their reasons for supplemental billings directly to the patients. A few patients are being queried for their reactions to the adequacy of payments, but permission of the attending physician is first being sought. Blue Shield expects the nation-wide survey to result in improvements in Blue Shield coverage.

The project has received the approval of the Oklahoma State Medical Association's Prepaid Medical Care Committee and all OSMA members are being asked to cooperate in completing the brief questionnaires.

Fund raising for Doctor's Medical Center, a new hospital for Tulsa, is now underway. The project is sponsored by a group of Tulsa physicians.

Oklahoma ranked 39th among all the states in per capita personal income for 1963.

Professional liability conferences are to be held regionally throughout the state during the months of September through December, according to Dave B. Lhevine, M.D., Tulsa, Chairman of the OSMA's Council on Insurance. The Council hopes to decrease the incident rate of claims through physician-education.

MEETINGS

July 29-31 American Nursing Home Association "Institute on Nursing Home Care," Marriott Motor Hotel, Dallas, Texas

October 13-18 National Convention, American Association of Medical Assistants, Sheraton - Oklahoma, Oklahoma City

October 15-16 AMA Conference on Aging and Long Term Care, Skirvin Hotel, Oklahoma City

October 26, 27 and 28 Oklahoma City Clinical Society. Sheraton - Oklahoma, Oklahoma City.

November 13-14 American Cancer Society, Oklahoma Division, Inc., Skirvin Hotel, Oklahoma City

November 29-December 2 American Medical Association, Miami Beach, Florida

ON WEDNESDAY, JULY 1st, 1964, Mr. Wilbur Mills (D., Ark.), Chairman of the Ways and Means Committee, introduced H. R. 11865 in the House of Representatives. Among other things, this Bill removes the exclusion in the existing law with respect to self-employed doctors of medicine and interns. Henceforth, these individuals will be covered under the system, effective with taxable years after December 31st, 1964. Beginning January 1st, 1965, a self-employed physician will be required to pay into Social Security 5.7 per cent of the first \$5400.00 of his annual income. This will increase to an even 6 per cent in 1966 and is graduated on upward to reach a level of 7.2 per cent in 1971.

Physicians may well ask "How did this come about?" Hasn't the House of Delegates of the American Medical Association gone on record repeatedly as opposing Social Security for doctors? Weren't the AMA people in constant touch with members of the Ways and Means Committee and kept informed as to what was going on?

Well, the House of Delegates of the AMA certainly has opposed Social Security for doctors. And it was presumed that AMA employees and officials close to the situation "on the Hill" in Washington were informed of the Ways and Means Committee's actions and intents. However, this Social Security measure for doctors seems to have been slipped in very quietly and with carefully studied timing to avoid announcement during the AMA meeting. As a matter of fact, the Speaker of the House of Delegates, Doctor Milford Rouse, made a dramatic announcement to the assembled Delegates on Wednesday, June 24th, that the House Ways and Means Committee had rendered its report with no action being taken on the King-Anderson Bill. This was loudly cheered by the Delegates. Doctor Rouse had not been informed of the Social Security action of this Committee, and it was peculiarly ignored by the press. The details were contained in a press release issued by the Ways and Means Committee "FOR IMMEDIATE RELEASE JUNE 25th, 1964," but not made available until later that evening!

As noted above, the Bill has now been introduced to the House and is expected to pass with a voice vote, so sure are its proponents that it will meet no opposition. The Bill will then go to the Senate, and then probably to the Finance Committee of the Senate before being referred back for final vote.

This all brings back the summer of 1960 when Mr. Mills introduced his original Bill for government assistance in medical care of the aged, legislation which eventually became the Kerr-Mills Law. Mr. Mills' original Bill had Social Security for physicians included. When this got to the Senate, and particularly to the Finance Committee of the Senate, Senator Robert Kerr struck out this amendment because he had previously polled the physicians of Oklahoma who expressed opposition to being on Social Security. Senator Byrd of Virginia, Chairman of the Finance Committee and a close friend of Senator Kerr's, then polled the doctors in the State of Virginia, and found similar opposition to Social Security. These men contrived successfully to eliminate the Amendment to Title II of the Social Security Act. This year, of course, there is no Senator Kerr to head the battle. Senator Byrd's feelings on the matter in the summer of 1964 are not known to this writer, but if a guess may be hazarded, it would seem that there will be little or no opposition to putting physicians on the Social Security plan.

As a matter of fact, the number of physicians already on Social Security is quite surprising. There are presently 278,275 physicians in the United States:¹ 63 per cent of these are in private practice; 17 per cent in hospital service; four per cent in teaching or administration or research; two per cent in laboratory or preventive medicine; eight per cent in Federal government service; and the remaining six per cent are not in practice or not in the country. It would appear then that 31 per cent of the physicians in this nation are probably employees and are already on the Social Security plan. Of the 63 per cent remaining, physicians in

private practice, estimates vary from 35 to 50 per cent as to the number who are already on Social Security for one reason or another: A part-time job in a State or government hospital, a separate business where the physician is necessarily put on Social Security, *et cetera*. There is also the question as to many different polls of Medical Societies on the eastern seaboard where the vote of the physician has been greatly in favor of putting themselves on this mandatory plan.

In any event, Social Security for physicians is imminent. The Editorial Staff of the *Journal* feels obligated to keep Oklahoma doctors informed of the progress of legislation in matters of this type, and we will endeavor to keep up with the activities in Washington and report them to you. There are probably more surprises in store during the coming months.—Walter E. Brown, M.D. □

1. A.M.A. Directory Report Service; Quarterly Tables of Distribution of Physicians by Type of Practice, Vol. 16, Supplement No. 51, Jan. 20, 1964.

Vocational Rehabilitation

BY NECESSITY the physician is playing an increasingly important role in the vocational rehabilitation of people with a limited capacity to work. "Rehab" is a state agency, associated with the United States Department of Health, Education, and Welfare. It is a good example of how a government agency can serve a useful function in working effectively with private physicians.

Oklahomans are fortunate in having had a rehabilitation program which has been administered so efficiently by Mr. Voyle Scurlock and his staff. Since the inception of the Vocational Rehabilitation program in Oklahoma in 1925, many handicapped individuals have been helped to help themselves, to become self-sufficient, tax-paying citizens. It has always been the policy of Mr. Scurlock and his staff to utilize the family physician to evaluate candidates and to continue such doctor-patient relationship in every instance possible. The disabled individual retains his dignity throughout the examination, needed treatment and educational programs.

The increasing need for physician-participation in the Vocational Rehabilitation

program is essentially the result of medical progress, i.e., the increasing number of disabling disorders which are now amenable to treatment. Examples of quite recent advances include surgical procedures involving the heart, rheumatoid deformities and occlusive vascular disorders.

It is desirable that physician participation in Vocational Rehabilitation remain in the domain of the family physician. Likewise, when needed, his usual *modus operandi* should be maintained in utilizing a team approach or consultation for most effective diagnosis and care.

In order to maintain the present doctor-patient relationship in this government-sponsored medical program, it behooves physicians to familiarize themselves with the nature of our State Vocational Rehabilitation facility. When we are called upon for examination and evaluation of a patient for "Rehab." our history, physical and laboratory examinations should be thorough and our reports meaningful. Information relative to the patient's family background, his personality and motivations are best known to his family doctor.

It is true that the "forms" to be completed may be troublesome and inadequate; however, a supplemental narrative report is always welcomed to augment the standard information forms.

The recent appointment of Doctor Francis Dill as a part time State Medical Consultant, and more recently the utilization of Area Medical Consultants* should facilitate communication between the patient, his family physician, the Rehabilitation Counselor and the Rehabilitation Division of the State Board of Vocational Education.

*Area Medical Consultants:

John Morey, M.D.
100 East 13th St.
Ada, Oklahoma
Ethel Walker, M.D.
1010 14th Ave., N.W.
Ardmore, Oklahoma
Raymond Engles, M. D.
321 Waco
Durant, Oklahoma
Hope Ross, M.D.
1101 East Broadway
Enid, Oklahoma

Royce B. Means, M.D.
1202 Arlington
Lawton, Oklahoma
William M. Wood, M.D.
Barnes Building
Muskogee, Oklahoma
Theo Williams, M.D.
210 Medical Arts Building
Tulsa, Oklahoma
O. W. DeHart, M.D.
Vinita, Oklahoma
E. R. Flock, M.D.
Medical Arts Building
Weatherford, Oklahoma

Your Medical Advisory Committee of the Oklahoma State Medical Association to the Vocational Rehabilitation Division welcomes suggestions, questions or comments from all members of our state association.—*William K. Ishmael, M.D., Chairman, Medical Advisory Committee.* □

The President Reports

DOCTOR EDWARD R. ANNIS, the outgoing President of the American Medical Association, reported to the House of Delegates in San Francisco that one of the medical profession's biggest needs at this time is for improved communications, both among physicians and between medicine and the general public. To help the AMA meet this need, Doctor Annis suggested that the Delegates consider a series of progressive dues increases which ultimately might raise the dues from their present level of \$45.00 yearly to about \$100.00 a year.

Among other recommendations in a five point program he outlined were "efforts to strengthen the nation's County Medical Societies." He noted that there are now some 1,929 County Societies, only 220 of which have paid executive staff members. In emphasizing a need for more activity at the county level, he commented that the 1700 County Societies without paid executives "all rely on busy doctors to take time from their prime purpose in practice to carry out programs suggested by their State and National organizations."

It is a little disappointing that Doctor Annis could not come up with something more original than a dues increase for improving the AMA. We have just this past

year reached the \$45.00 level, and it is doubtful if the average doctor is very enthusiastic about going into another progressive dues increase plan at the present time.

In order to strengthen the nation's County Medical Societies, Doctor Annis suggested that the AMA develop training programs for staff members of constituent organizations and also develop the capacity for aiding small Medical Societies which have no staff or only part-time staff assistants. This appears laudable indeed. Doctor Annis did not elaborate on the mechanics of this program.—*Walter E. Brown, M.D.* □

A Pound of Prevention

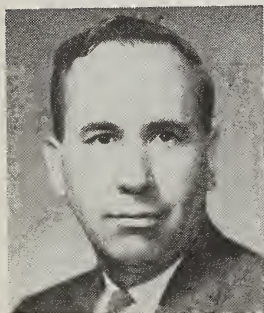
A NATIONWIDE STUDY reveals that one out of six of today's physicians will be a defendant in a professional liability action during his professional career. Regardless of his guilt, his professional reputation will be damaged by the allegations against him, and there is a good chance that the experience will cost a great deal of money. Win or lose, the costs of defense will be expensive, and even if negligence is not clearly proven, a compassionate jury may return a verdict for the plaintiff.

Technically, to return a verdict against a defendant doctor, the plaintiff must prove that the physician owed a *duty* to the patient, that he was *derelict* and breached that duty by failing to act as the ordinary, competent physician in the same community would have acted under the same or similar circumstances, that such failure was the *direct cause* of the patient's injuries, and that *damages* to the patient resulted from the negligence.

Some malpractice suits do involve negligence, but far more cases are based upon medico-legal naivety.

Complications or untoward and unexpected results will continue to occur as long as physicians have the courage to come to grips with the complex ills of the mind and body of man. Legal actions in such instances are preventable if physicians are aware of medico-legal hazards and conscientiously apply medico-legal therapy.

Educational materials are available from the OSMA Executive Office. One hour's reading time may prevent years of regret. □



We hear a lot of conversation these days about the cost of belonging to the associations, societies and other medical groups in organized medicine. This may or may not mean that the price is out of line. Personally, I feel that it is not.

At the recent AMA meeting it was suggested by the outgoing president, Doctor Edward Annis, that the AMA dues be increased to \$100.00 yearly over the next few years. This is a \$55.00 raise! On top of this it is very pressing on the county and state levels that more funds be made available. During the last state House of Delegates meeting, several items were approved that will require considerable financing. We are asking the county societies to perform duties and carry out programs that require more money. All the other societies, G.P. and specialty, are entering into expanded and intense programs that need our help. This means money, money, money! Where can it come from? It must come from you, the members. The membership is demanding that we enter into new and expanded programs and necessity is adding its toll.

When we look at these costs we rise in anguish and our first reaction is to rebel. Then we take a second look which may help us realize that it costs money to accomplish our purposes. You only get what you pay for.

I'm sure that if we examine the figures we will see that we pay no more dues—or not as much—as members of the carpenter, electrical and plumbing unions, not to men-

tion many other trade and professional groups. We just complain more.

The approximate dues paid by these groups is well above ours, according to Doctor Annis. This does not include special assessments on dues. Our annual dues now are \$45.00 for the AMA and \$57.00 for the state association, with county society dues variable. To this total we must add G.P. or specialty fees. Even with all this we are not overtaxed for the service that we receive.

I must say here, in fairness, that the next and heavier dues raise should be allowed on the county and state levels before increased AMA dues are levied. If all available funds are channeled to Chicago, we will be unable to carry out all the local and state projects handed back to us by the national group, as well as those asked of us by our members.

I don't mean by this that the AMA does not need more funds. I only hope that a large share of the available funds stay at home. The whole picture must be seen from top to bottom and not handed down from the top. This sounds too much like the way we do it in big government.

Ask yourself this question: Where would you be at this instant if organized medicine hadn't been strong enough to defend you? The answer to THIS QUESTION is a foregone conclusion: "An Employee of the State!" I don't believe you are ready for this. The price of freedom will be worth any price that it costs.

Why this poor news? It appears to me that it is better to be advised of something that is sure to come. We can then discuss it, know the subject, and be prepared to act calmly and wisely when it arrives. The day will arrive for an important decision.

Harlan Thomas MD

Modern Concepts in the Control of Hypertension

W. ARTHUR STAUB, M.D.

The vast number of antihypertensive agents often result in confusion to the clinician. An analysis of the various types of agents and their indications is presented.

WITHOUT DOUBT the strides taken in medicine in the last ten years have done more to add to man's longevity than in any other decade. The advent of antibiotics, chemotherapeutic agents, anticarcinogenic substances, oral antidiabetogenic drugs, psychotherapeutic medicines, and antihypertensives are only a few specifics in the long list of advances. It was once remarked, "The key to long life is to contract a chronic disease and learn to live with it." Nowhere is this philosophy more applicable than in the patient with hypertension. During the last decade we have learned much about hypertension—theories of etiology, complications, diagnosis, ultimate prognosis and treatment—yet we still have a long way to go.

The purpose of this paper is to review several basic principles in the treatment of hypertension, the agents available today, how they act, some of their side effects and their indications. For the most part, dosages are not mentioned, since they have to be adjusted to the individual patient. This

depends upon the severity of his hypertension and the presence or absence of complications.

CLASSIFICATION OF HYPERTENSION

Many classifications of hypertension have been devised, most of which, however, have dealt with the various stages and degrees of severity. Merrill,¹ on the other hand, has chosen to classify hypertension on the basis of etiology. From this, one can readily determine those types of hypertension which lend themselves to surgical and medical correction and thus become potentially "curable" in distinct contrast to those forms which are merely "controlled" by judicious medical treatment.

- I. Pulmonary hypertension
- II. Systemic hypertension
 - A. Systolic hypertension only
 - 1. Increased stroke volume
 - a. Thyrotoxicosis
 - b. Anemia
 - c. Heart block
 - d. Arteriovenous fistula
 - e. Psychogenic disturbances
 - 2. Rigidity of the aorta
 - a. Arteriosclerosis
 - B. Combined systolic and diastolic hypertension*
 - 1. Renal
 - a. Pyelonephritis
 - b. Glomerulonephritis
 - c. Congenital lesions
 - d. Obstructive lesions

*Any of the conditions associated with diastolic hypertension may become rapidly progressive (malignant). This occurs much more frequently in the so-called "essential" hypertension.

This paper was presented before the Pontotoc County Medical Society Seminar, Ada, Oklahoma, March 13th and 14th, 1964.

- e. Renal vascular occlusion
2. Endocrine
 - a. Acromegaly
 - b. Adrenal cortical hyperfunction
 - c. Pheochromocytoma
3. Neurogenic
 - a. Brain tumor (rapidly expanding)
 - b. Cerebrovascular diseases
 - c. "Diencephalic syndrome"
 - d. Poliomyelitis
 - e. Psychogenic disturbances
4. Unknown etiology
 - a. Essential hypertension (benign)
 - b. Eclampsia
5. Miscellaneous
 - a. Coarctation of the aorta
 - b. Increased intravascular volume

LIFE EXPECTANCY OF THE HYPERTENSIVE PATIENT

The mortality rate among hypertensive patients is double or more that of the standard population. Deaths from heart disease, cerebrovascular and renal complications are vastly increased, particularly when associated with the more severe degrees of elevated blood pressure.

Doctor Richard Gubner, Medical Director of the Equitable Life Assurance Society and Kings County Hospital Center in New York City, adequately points out that the atherosclerotic changes in the large arteries are in no way qualitatively different in hypertension from the arteriosclerosis in the coronary arteries and aorta which develop in the absence of hypertension, but that *elevated blood pressure accentuates the development of these lesions*. Likewise, arteriolar sclerosis similar to that observed in hypertension develops in subjects with normal blood pressure, particularly in the renal arterioles, but the changes are definitely accentuated in hypertension in relation to its degree.²

These factors are paramount in young people—probably even more so than in elderly hypertensive people. Evidence is accumulating almost daily from such outstanding investigators and clinicians as Brest, Moyer,

Freis, Herrmann, Clark and many others demonstrating the importance of the early treatment of hypertension. Several investigators have reported a more or less permanent decrease in elevated pressures to near normal level after discontinuing antihypertensive agents over a period of years in some patients. Others have shown prevention or at least a delay in the advancement of cerebrovascular, coronary artery and renal insufficiency complications with adequate early treatment of hypertension.

Of particular interest is the fact that one million of the 5.5 million hypertensive patients in the United States are under 45 years of age. In the older population, hypertension among females is more than two and one-half times as prevalent than among males in the 65 to 74 year age group. The death rate from hypertensive heart disease, however, has declined from 56.5 per 100,000 population in 1950 to 36.6 per 100,000 in 1960. This remarkable decrease has been due to the treatment of the causes of hypertension rather than effects, the advent of new drugs and the better use of old drugs.³

TREATMENT OF HYPERTENSION

A. General Considerations

1. Every patient with hypertension first of all deserves as complete an initial work-up as possible. This is important not only from a diagnostic and prognostic standpoint, but also in establishing a base-line for determining the future rate of progress of the disease. *The overall picture is more important than the temporary status at any given moment.*
2. Every hypertensive patient should have a complete series of laboratory, funduscopy, X-ray and EKG studies to rule out those types of hypertension which can be cured by specific treatment. Included in these studies should be Metopirone,[®] Regi-

W. Arthur Staub, M.D., a 1947 graduate of the Temple University School of Medicine, is now Senior Research Associate of the CIBA Pharmaceutical Company.

tine,[®] and VMA tests for determining hypertension of endocrine etiology, as well as spinal tap, ventriculogram, encephalogram or angiogram to rule out neurogenic pathology. The use of aortography is becoming a significant tool in ruling out hypertension due to renovascular disease.

3. *Success* of treatment depends primarily on three factors:

- a. A positive attitude on the part of the physician.
- b. Patience and persistence on the part of the patient as well as the physician is necessary. Hypertension is a long term chronic disease requiring treatment for years. Changes in the status of the patient's hypertension are not likely to result in immediate dramatic improvement or deterioration, except perhaps in the malignant types. Therefore patient visits are required at regular intervals for an extended period—usually monthly.
- c. *Thoroughness of initial work-up with repetition of previous tests when progress is unsatisfactory.* Likewise, if repeated tests reveal nothing new or changed, reevaluation of treatment itself must be undertaken.

B. Factors other than drug therapy in the treatment of hypertension:

1. Diet:
 - a. If overweight, diet to permit weight reduction.
 - b. Salt reduction — especially in presence of congestive heart failure.
 - c. Fat is usually restricted because it is calorogenic and may be atherogenic as well.
2. Psychological management — especially in the apprehensive and tense patient.
3. Surgical correction where indicated —e.g., thyrotoxicosis, pheochromocytoma, coarctation of aorta, etc.
4. Sympathectomy — used primarily in:
 - a. Patient who will not take drugs

conscientiously or who will not tolerate their side effects.

- b. Patients who have not responded well to drugs even though they have taken them conscientiously and persistently, and in whom repeated work-up has failed to reveal any new underlying etiology.

- c. At times, drug therapy may be used after sympathectomy, especially if results have not been as anticipated.

C. General action of drugs on factors affecting blood pressure:

Drugs used in the treatment of hypertension can affect change in one or more of the major determinants of the blood pressure; simultaneously the compensatory mechanisms which are initiated to affect this change are also suppressed by drug action. Drugs can affect the following:

1. Cardiac output
2. Peripheral resistance
3. Volume of blood in circulation
4. Circulating endogenous "pressor" substances, such as angiotensin and serotonin.

D. How drugs alter these factors:

The important determinants of blood pressure are subject to alteration by several types of drug action, namely:

1. Action on involuntary muscle, such as that produced by acetylcholine, histamine, nitrites or adrenergic blocking agents.
2. Interference with autonomic reflex circuits on the afferent side such as produced by veratrum alkaloids.
3. Interference with reflex circuits on the efferent side such as produced by ganglionic blocking agents, guanethidine or bretylium.
4. Interference with autonomic circuits within the central nervous system such as produced by sedatives, reserpine or chlorpromazine.
5. By a diuretic action which alters electrolyte excretion and plasma volume.
6. Direct antagonism of endogenous "pressor" substances (serotonin

and angiotensin) by hydralazine and antiserotonin.

7. One might also include a category of drugs which interfere with so-called "transmitter substances" necessary in reflex transmission of nerve impulses in the autonomic nervous system. These would be monamine oxidase inhibitors and methyldopa.

CHOICE OF AN ANTIHYPERTENSIVE DRUG

The choice of an antihypertensive agent will depend upon many variable factors: The age of the patient, the severity and duration of his hypertension, the presence or absence of cerebrovascular, renal and coronary arteriosclerosis, the presence or absence of concomitant disease such as diabetes or hyperthyroidism and the side effects of the drug whose use is contemplated. Most clinicians prefer single agents in preference to a combination of agents, but a factor not to be overlooked is that the combined agents permit in most instances a reduction of effective dosage with a concomitant reduction in the side effects. Another point to be considered is not to make drug therapy too complicated or too rigid, as the patient might become easily discouraged. Treatment should be flexible enough to permit reduction in dosage if side effects are not well tolerated. Here the patient should be cautioned that if side effects are severe, he should not discontinue the drug, but should reduce the dosage and report immediately to his physician. Vitally important too is not to drop a highly elevated blood pressure precipitously, else cerebral or coronary ischemia may ensue. Many elderly patients with long standing severe hypertension (and especially those with advanced arteriosclerosis) probably should not have their pressures reduced to normotensive levels for this reason.

A. Rauwolfia alkaloids and their derivatives:

Reserpine and other rauwolfia alkaloids deplete body storages of catecholamines in the brain, myocardium and vessel walls. Arterial blood pressure is reduced by lower-

ing peripheral resistance, since the cardiac output is almost unchanged. In addition, there is a bradycardic effect, possibly accomplished by reduction in the activity of cardioaccelerator nerves. Lowered peripheral resistance is probably due to diminished sympathetic tone resulting from a loss or depletion of the transmitter substance at peripheral nerve endings.⁴

Mental depression, however, is a side effect to be anticipated. It occurs primarily in a few instances where total daily dosages exceed 1 mgm., and should be used with considerable caution in patients with a history of mental illness. Lassitude, drowsiness, nasal congestion and increased frequency of stools also occur in some instances. Therapy with reserpine and other rauwolfia alkaloids should be continued for at least one week before making further evaluation of the patient and because of its lasting effects should be withdrawn two weeks prior to surgery where significant hypotension or bradycardia during anesthesia is a concern.

B. Saluretics:

In some patients with benign hypertension a saluretic may even be sufficient as the sole agent.

Dietary salt restriction is generally considered a mainstay in the medical management of diastolic hypertension. Grollman and coworkers have demonstrated the hypotensive responsiveness to sodium restriction as have others.

The exact mechanism of action of the saluretics is still unknown. Freis suggested that the hypotensive effect was related to a reduction in plasma volume through their natriuretic effect and a consequent decrease in cardiac output. Varnauskas and coworkers, however, have shown that during treatment with chlorothiazide a lower blood pressure was preserved even after restoration of the original plasma volume.^{4,5}

It is now well documented that sodium ions increase local vascular reactivity, especially to circulating catecholamines. A decrease therefore in sodium or steroid restriction will lessen this reactivity. Potassium tends to have an opposite effect from sodium on vascular tissue. In this regard, the Kempner rice diet is high in potassium and therefore has a protective value against excessive sodium ingestion.

Since the introduction of chlorothiazide, many new compounds have appeared with only minor differences in action. The hydrochlorothiazides exhibit about ten times the potency of chlorothiazides with slightly fewer side effects. All the saluretic agents have a kaliuretic effect.

In the presence of congestive heart failure additional potassium may be necessary to prevent hypokalemia produced in some patients by the use of saluretic agents. Contrariwise, excessive potassium should be avoided in patients with chronic renal disease where potassium retention rather than loss may be a problem.

Recently, the literature has mentioned cautions to be observed when the saluretics, especially the thiazides, are used in patients with gout and diabetes. If gout does occur, 200 to 500 mgm. of Benemid daily blocks the uric acid retaining effect of the thiazides. In diabetes, it is fairly well established that the thiazides do cause a decrease in glucose tolerance in some diabetic or potentially diabetic patients. As yet there is insufficient evidence that the thiazides produce true diabetes in patients who show normal glucose tolerance curves and who do not have a family history of diabetes.

C. Hydralazine (Apresoline®):

Hydralazine, first introduced in 1950, depresses the outflow of sympathetic impulses by blocking the pressor effects of several enzyme systems in the hypothalamus, medulla and at the neuro-effector junctions. Thus, hydralazine has central and peripheral antihypertensive action, lowering both systolic and diastolic pressures. Peripherally it produces vasodilatation on the arterial side of the circulation; as a result venous dilatation and resulting orthostatic hypotension do not occur. The antihypertensive effect of hydralazine is attended, however, by an increase in heart rate and cardiac output. In contrast, the ganglionic blocking agents affect both arterial and venous sides of the peripheral circulation, cause a decrease in splanchnic circulation, and result usually in a decline in right heart filling and cardiac output.^{4,5,6}

The use of hydralazine is attended by headaches, nausea, vomiting, flushing, tachycardia and increased angina in some patients. However, the addition of saluretic

agents and/or reserpine can neutralize the cardiostimulant effects and reduce cardiac output. Parenterally, the rapid action of hydralazine and the more sustained action of reserpine makes their combined use the drugs of choice in the treatment of hypertension due to acute glomerulonephritis and toxemia of pregnancy. Moyer feels that these agents are 100 per cent effective in the latter.

Prolonged usage of hydralazine in doses above 300 mgm. daily may lead to serious toxicity in 10-14 per cent of patients in the form of arthritic-like symptoms or a lupus-like syndrome.

D. Ganglionic blocking agents:

These agents will lower the blood pressure in virtually all properly selected patients, but the selection of these patients is most important. The general indications are met by those with malignant hypertension, hypertensive crises (especially associated with congestive right heart failure), and in those with severe static hypertension which has not responded to more conservative measures. Patients with very labile diastolic pressures should not use these agents, since they are likely to develop orthostatic hypotensive crises. Extreme caution should be observed when using these agents in patients with renal failure and azotemia, and in the elderly with advanced cerebral atherosclerosis.⁵

Because they block sympathetic and parasympathetic action, orthostatic hypotension, dryness of mouth, blurring of vision, urinary retention, and impotence may be prominent.

E. Veratrum Alkaloids:

These compounds are probably the most potent antihypertensive agents available today, but their use is limited primarily to parenteral administration in the treatment of hypertensive emergencies.

Their action is two-fold—a direct central action on the vasomotor center which diminishes the vasoconstrictor impulses, and through reflex vagal stimulation, causing bradycardia and a reduction of blood pressure.⁵

Veratrum preparations also have an emetic effect, and the range between their hypotensive and emetic dosage is narrow.

F. Guanethidine (Ismelin®):

In the more moderate and severe hypertensive patients the use of guanethidine has an important place. Guanethidine depletes tissue stores of catecholamines and blocks the formation of additional norepinephrine at postganglionic sympathetic nerve endings. Unlike the ganglionic blocking agents, guanethidine does not suppress the parasympathetic nervous system and therefore is devoid of those side effects characteristic of that group of drugs.⁷

Administration of this potent antihypertensive agent requires thorough knowledge of its action. After oral dosage, its maximum effectiveness may not appear for 24 to 36 hours but it may last for several days and even, in some instances, as long as two weeks. Because of this cumulative effect, the drug need only be administered once a day and so provides the patient with one of the most inexpensive and uncomplicated forms of therapy available today.

The most pronounced side effects of guanethidine are related to the unopposed action of parasympathetic activity—bradycardia, diarrhea, orthostatic hypotension, failure of ejaculation but not impotence, etc. Tolerance to guanethidine is almost nonexistent. This drug is considered by many to be the most ideal antihypertensive agent available. When used in combination with other antihypertensive agents such as reserpine and the thiazides, the effective dose can easily be lowered which results in fewer side effects. Caution is urged, however, when guanethidine is combined with reserpine, since the synergistic action of these two drugs may result in excessive hypotension.

G. Enzyme inhibitors:

In this category there are two groups of drugs—namely, methyldopa, a decarboxylase inhibitor, and the monamine oxidase inhibitors (Eutonyl, etc.) which play a role in the further breakdown of norepinephrine and epinephrine. The action of these two groups of drugs is still unknown and paradoxical to ordinary physiological thinking.

1. Methyldopa:

Methyldopa is a potent inhibitor of most decarboxylases responsible for the biosynthesis of aromatic amines. It inhibits the

formation of dopamine from dopa in many tissues but its ability to block the formation of norepinephrine is erratic.

Sjoerdsma⁸ believed initially that decarboxylase inhibition possibly depleted catecholamines by diminishing their formation and that this would account for blood pressure lowering. Pharmacologic effects in patients suggest that this is not the entire mechanism, however. It may be that the pharmacological effects are unrelated to decarboxylase inhibition or catecholamine depletion, but instead are related to changes in the amino acids or corresponding amines.

The use of methyldopa in the treatment of hypertension rests somewhere between the ganglionic blocking agents and guanethidine, and reserpine, thiazides and hydralazine. Reports of clinical use are both complimentary as well as deleterious. Suffice to say, however, the difficulties with methyldopa lie in its frequent side effects (sedation, vertigo, headache, abdominal distention including paralytic ileus, weight gain and edema, frequent bouts of congestive heart failure, fever, decrease in hemoglobin and abnormal liver function) and an apparent erratic effect on blood pressure. Apparently it does lower blood pressure in the recumbent as well as the upright position. Tolerance is a major deterrent with methyldopa; this develops in most patients anywhere from four to 12 months after therapy is started.

2. Monamine oxidase inhibitors:

The direct mechanism of action of the monamine oxidase inhibitors is still unknown. Three theories have been advanced:

- A decreased response of the peripheral arteriole to norepinephrine resulting from an excess of norepinephrine in the blood vessels.
- A blocking of nerve impulses at the sympathetic post-ganglionic fiber-receptor site junction due to a paralytic action from excess norepinephrine.
- A possible tissue-selectivity factor, accounting for the fact that certain monamine oxidase inhibitors influence blood pressure only slightly, while others produce psychostimulation and anti-anginal action.

The monamine oxidase inhibitors induce mostly orthostatic hypotension and are espe-

cially active when used with chlorothiazides. They too are free of parasympathetic blocking action, as are guanethidine and methyldopa.

In addition to the effect of monamine oxidase inhibitors on catecholamines, they also prevent serotonin breakdown in the body. This causes an increase in serotonin especially in the brain. It has been suggested by Wooley and Shaw that certain mental disorders may arise from abnormalities, probably a deficiency, in serotonin content of the brain. Consequently, the use of monamine oxidase inhibitors is a rational approach to this therapeutic problem.

The monamine oxidase inhibitors therefore can exert three effects—hypotensive, especially in the orthostatic position, anti-anginal and mood elevation. Their use, however, is not without some problems, primarily those associated with their effect on the catecholamines. Caution should be exercised when central stimulants or depressants are administered concomitantly with monamine oxidase inhibitors due to their potentiating effect. Guanethidine and reserpine should not be employed during monamine oxidase inhibitor therapy due to the possibility of an acute pressor response resulting from a sudden release of catecholamines. (Regitine,[®] here, can be used to combat this pressor effect.) Due to the increased feeling of well being together with the anti-anginal effect in patients with angina pectoris, these patients should be warned not to increase their physical activity thinking that their coronary disease has been improved. Other

side effects including orthostatic hypotension, elevation of blood urea nitrogen, liver damage, adverse reactions with halothane or cyclopropane anesthesia, fever and tremors, are all to be reckoned with. Caution must also be used when these agents are given to patients with hyperactive or hyperexcitable personalities since full blown mania can be precipitated. The use of pressor substances such as tyramine (from certain cheeses) and the pressor agents commonly employed in local dental anesthetic agents can result in sudden fatal hypertensive crises.

SUMMARY

We have tried to consider some of the concepts in the control of hypertension. The mechanisms of action of drug therapy in general as well as the specific use of the more common and recent antihypertensive agents have been mentioned.

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A New Approach in the Study of Mental Retardation

JOSEPH C. DENNISTON, M.D.

The author suggests we investigate the possibility of biochemical error of metabolism in mothers when retardation is manifest in two or more siblings.

THREE OF THE next 100 children born in America will be mentally retarded. This condition afflicts twice as many individuals as blindness, polio, cerebral palsy and rheumatic heart disease combined. An estimated 5,400,000 people in our country bear this label. Two hundred thousand of this group represent severely retarded children and adults who are being cared for in residential institutions at public expense. State and local communities expend 300 million dollars annually in capital and operating costs for their institutional care. In addition, 250 million dollars is invested in special education, welfare, rehabilitation and other services for those residing outside of public institutions. Thus it is apparent that this country is confronted with a serious and burdensome problem.

The key to its prevention lies in an understanding of its etiology. During the past decade numerous causative factors have been identified, and preventive measures insti-

tuted. Despite this, the road leading to a full understanding of the complex phenomena involved still lies far ahead of us and remains ill-defined as to the direction in which it may lead.

In many state institutions for the mentally retarded not more than 25 per cent of the cases are identified with any degree of accuracy. Seventy-five per cent remain in the diagnostic category of "mental retardation due to unknown or uncertain cause." When the medical profession has been able to identify the etiology, it has been possible in many instances to devise effective preventive measures. Familiar examples of this include German measles, Erythroblastosis fetalis, lead poisoning and the dietary management of certain inborn errors of metabolism.

During the past decade tremendous strides have been made in our understanding of biochemical errors in metabolism associated with mental retardation. A few noteworthy examples include phenylketonuria, galactosemia, maple sugar urine disease, histidinemia, hyperglycinemia and Hartnup's disease.

Recently a very interesting and challenging clinical observation was observed in a Tennessee state institution for the retarded.¹ This suggested that a new approach to our understanding of mental retardation is now possible.

A 70-year-old white (formerly blonde) blue-eyed mentally retarded woman was observed to exhibit a strongly positive reaction

on routine urine testing with ten per cent ferric chloride. When Phenistix and DNPH confirmed the accuracy of this finding, a fasting serum phenylalanine was determined at 27.4 mg (normal < 2 mg). The serum histidine level was 2.2 mg (normal < 2 mg). A 24-hour urine amino acid study revealed an excessively high excretion of phenylalanine—714 micro moles, (normal < 100 micro moles).

Urine paper chromatography studies² revealed the presence of both phenylpyruvic acid and orthohydroxy phenylacetic acid in excessive amounts. A phenylalanine loading test utilizing 0.2 gm/kl. of 1-phenylalanine was administered: a fasting level of 26.8 mg.; one hour 53.6 mg., two hours 58.5 mg. was recorded. (Normal fasting level < 2 mg and in two hours < 18 mg.)

The fact that this woman was a phenylketonuric was not remarkable since one per cent of institutionalized retardates are so affected. It was of considerable interest, however, since she was 70 years of age and had never previously been recognized as phenylketonuric.

A good deal of excitement was elicited when we realized that she had five mentally retarded children, all of whom were or had been institutionalized at this same Tennessee facility. This afforded us an opportunity to investigate the offspring of a phenylketonuric.

Complete laboratory studies, including repeated serum phenylalanine levels,³ twenty-four hour amino acid analysis and 1-phenylalanine loading tests were administered on her three currently institutionalized offspring. All proved to be heterozygous carriers of the recessive gene and none were phenylketonuric. Of the two unaccounted for retarded offspring, one died in 1940 while the other escaped the Tennessee facility in 1953.

Since heterozygous carriers do not possess the disease, it became necessary to explain the cause for their retardation. We should like to postulate that perhaps the high serum phenylalanine level sustained by this mother throughout her pregnancies is the etiological basis for the retardation of her offspring.

Though there is no experimental parallel to these findings, a number of studies on

sub-human species and clinical observations in man have demonstrated that the more immature the brain, the more susceptible it is to phenylalanine intoxication. Since it is now known that phenylalanine readily crosses the placenta, a high maternal serum phenylalanine level might be expected to produce fetal brain damage. Already it has been observed that excessive phenylalanine can injure the developing fetal brain of an otherwise normal young animal, yet no studies have been reported regarding the effects of abnormally elevated maternal phenylalanine levels on the developing fetal brain cells.

We wonder if the determining factor for the retardation is dependent on the level of serum phenylalanine or its metabolites. Perhaps when serum levels exceed 25 mg. throughout the prenatal period, irreversible cerebral damage to the developing fetal brain cells can occur.

While investigating this case, we discovered the proband had a sister residing in Florida.⁴ At our request, she was evaluated at the University of Florida College of Medicine and was found to be phenylketonuric. Her history revealed the loss of six of her seven offspring during their childhood. The one surviving was a female resident of the same Tennessee facility as the proband. Further studies proved her to be a non-phenylketonuric retardate and heterozygous carrier.

With our increasing recognition of some phenylketonuric females in the general population who are mildly retarded and who may subsequently become pregnant, the possibility of their elevated serum phenylala-

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Doctor Denniston is a Fellow of the American Academy of Pediatrics and a member of the Advisory Council on Clinical Programs for the Mentally Retarded, Children's Bureau, Washington, D.C.

nine levels producing irreversible cerebral damage to the developing fetus may be of considerable significance.

Along similar lines one wonders whether other unrecognized inborn errors of metabolism among our pregnant female population might damage the developing fetus. Such possibilities suggest that research be directed into studies of biochemical errors of metabolism among our normal female population.

When the practicing physician sees two or more patients in the same family whose retardation is difficult to determine, a high degree of suspicion for some biochemical

error in the mother may be well justified and investigative studies instituted along such lines.

The significance of such studies lies in the fact that if errors in protein metabolism are discovered, perhaps maternal dietary control of the offending amino acid might prevent the retardation of the offspring. □

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HEARINGS ON M.D.-OWNED PLANTS SCHEDULED

The Senate Antitrust and Monopoly Subcommittee, under the chairmanship of Senator Philip Hart (D. Mich.), will hold hearings this month on physician-owned pharmacies, drug repackaging and drug redistributing operations.

The subcommittee staff has been studying in this area for two years. Between 15 and 20 witnesses will be called, but names were not announced. The witness list will include representatives from drug manufacturing companies, state licensing boards and national trade associations. In announcing the hearings Hart said:

"On the face of it, it would not seem unlikely that restraints of trade might develop when a doctor stands to benefit financially by prescribing one drug over another or by giving business to one pharmacy over another. Therefore, restraints of trade and unfair trade practices arising from this apparent conflict of interest will be our principal area of inquiry.

"However, we must determine also what effects on the consumer doctor-ownership of these enterprises may have. Certainly, it is possible that in some cases patients are paying a higher price than necessary. Another effect could be the frustration of the generic-name portion of the drug amendments of 1962, which were intended to lower the cost of drugs to the consumer.

"A patient given a prescription for a trade drug under the name of a doctor-owned company is in effect a captive consumer. We plan to introduce some of the subpoenaed material into these hearings and will ask representatives from the companies to comment on it."

The Ectopic Thyroid Gland

H. LELAND STEFFEN, M.D.

A review of the embryology, symptomatology, diagnosis and treatment of the ectopic thyroid gland with an illustrative case report.

A TRUE ectopic thyroid gland may occur at any point in the descent of the thyroid primordium from the floor of the pharynx to the suprasternal notch (figure 1).

Lingual goiters are extremely rare even though Ward and his associates, while reviewing the literature in 1954, found over 200 reported cases. They noted that there were only three in approximately 800,000 admissions to the Johns Hopkins Hospital, and only three cases were found among 25,000 goiters treated at the Lahey Clinic up to 1947.³ Of 2,000 thyroid surgical procedures at St. Anthony Hospital, Oklahoma City, during the past ten years, not a single case of a true ectopic thyroid gland is reported. This same period of time represents approximately 200,000 total admissions to this hospital.

Even more rare is the situation in which the thyroid primordium does not develop into the bilobed form, but persists as a small round structure in the midline of the upper neck. The recognition of this situation is the reason for the presentation of this paper. There is a marked sparsity of information both in the textbooks and in the literature regarding this unusual condition. Gross writes that they had on record only three such cases during the existence of Boston Children's Hospital, and the Harvard Medi-

cal School.² While these mid-line globular ectopic thyroid glands are extremely rare, all who do general surgery should be fully aware of this very important anomaly, the associated pitfalls concerning its recognition, and proper treatment.

The thyroid gland is the first of the pharyngeal derivatives to make its appearance in the developmental process. At the end of the fourth week a median diverticulum arises from the floor of the pharynx at a cephalocaudal level between the first and second pharyngeal pouches. This small process very soon loses its connection with the floor of the pharynx, but its point of origin remains marked by a small depression known as the foramen cecum. Now free from its parent epithelium this thyroid primordium migrates caudad, along a path ventral to the pharynx. At the beginning of the seventh week it comes to lie at about the level of the laryngeal primordium. The greater part of its bulk now consists of the lobes which extend to either side of the midline with only a narrow isthmus of tissue connecting them medially. The typical characteristic thyroid follicles then become established during the third and fourth months of embryonal development.

The parathyroid glands ordinarily form as two pairs. One pair is derived from the third pharyngeal pouches, and the other pair from the fourth pharyngeal pouches. Due to their origins, they are commonly designated as parathyroids III and IV. During the seventh week both of these are freed from the parent pouches and start to descend in association with each other. Parathyroids III pass parathyroids IV in the migration process, and thus form the inferior parathyroid glands. Any of these parathyroid glands may be adherent to or imbedded within the thyroid capsular tissue.⁴

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Presented as surgical resident at Staff Meeting, St. Anthony Hospital, June, 1961.

It may prove of great value to evaluate carefully any patient presenting with a small, midline, spherical mass, a centimeter or two in diameter and just in front of, or below, the level of the hyoid bone. This type of mass is readily mistaken for a thyroglossal duct cyst. If this mass is actually an ectopic thyroid gland and is removed, believing it to be a thyroglossal duct cyst, the patient will be thrown into myxedema, for in most instances, this will be the only thyroid tissue that the patient has. When ectopic thyroid tissue is present, complete absence of thyroid in its normal location occurs in approximately 70 per cent of instances.¹ On physical examination it will prove to be virtually impossible to differentiate between an ectopic thyroid gland, and a thyroglossal duct cyst. Despite this very marked gross maldevelopment of gland configuration, these patients will display no manifestations of thyroid dysfunction in early life. Patients with this thyroid abnormality have a round-

ed, asymptomatic, midline or nearly midline mass near the level of the hyoid bone in the neck. This mass is smooth in outline, firm in consistency, unattached to the skin, and should move some on deglutition. The mass, if thyroid tissue, will transilluminate poorly and this might help to differentiate it from a thyroglossal duct cyst. In many other respects these two conditions are indistinguishable on routine physical examination. Other fairly common midline cervical masses which also should be considered are: dermoids, hygromas, hemangiomas, and lipomas. A history of any marked variation in size, redness or tenderness is important, and indicates a thyroglossal duct cyst rather than an ectopic thyroid gland. As in so many other conditions, the primary prerequisite is that the diagnosis of ectopic thyroid gland be considered in these patients.

The surgeon who expects to find a thyroglossal duct cyst should immediately be suspicious when he has encountered a mass which has a fleshy consistency, and which has vessels on its surface. A thyroglossal duct cyst has a perfectly smooth surface without vessels traversing its surface. At the operating table the correct decision must be made immediately. Aspiration will yield a thick translucent fluid if the mass is a thyroglossal duct cyst, but if there is no fluid, further identification must be carried out. Great care must be exercised to see that the mass is not disturbed from its attachment, and that none of its blood supply is compromised in any way. Such a nodule should then be incised in line with the trachea and in situ, and if it is not grossly thyroid tissue, a frozen section study should be obtained. Thus, the final diagnosis should be made available to the operating surgeon.

If this mass has proven to be thyroid tissue the next step is to ascertain the presence or absence of a normally placed thyroid gland. Usually it is absent. It is usually surgically unwise and impossible to adequately dissect down from the high neck incision to obtain the necessary information, hence it is justifi-

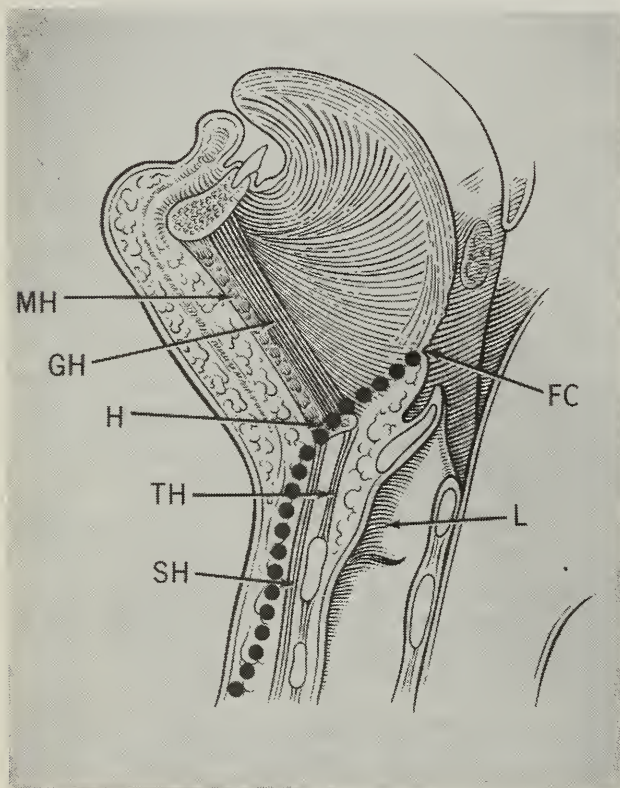


Figure 1. Schematic demonstration of sagittal section through tongue, larynx, and neck. Dotted line demonstrates area of descent of thyroid primordium. GH: geniohyoid muscle; MH: mylohyoid muscle; H: hyoid bone; SH: sternohyoid muscle; FC: foramen cecum; TH: thyrohyoid membrane; L: larynx.

H. Leland Steffen, M.D., a 1954 graduate of the University of Oklahoma School of Medicine, limits his practice to his specialty, general surgery. He is presently in practice in Enid, Oklahoma.

able to make a transverse incision of adequate length over the area of the thyroid isthmus to expose and positively identify the normal thyroid gland. Making this exploratory incision is mandatory to prevent the production of myxedema by blindly and unhesitatingly removing a high ectopic thyroid gland. It is undoubtedly completely impractical to explore for the parathyroid glands if the normal thyroid gland is not present.

The entire situation is far more serious if all of the parathyroid glands are intimately attached to the ectopic thyroid gland, and are thus removed with the thyroid mass. This may well result in an early postoperative death unless the produced problem of hypoparathyroidism is recognized by the positive Chvostek's and Trousseau's signs. A potential fatality can thus be prevented but the child and his doctor will now be faced with the lifelong and difficult problem of total thyroid and parathyroid substitution, the latter of which is fraught with many complications.

There are now four possible considerations at hand for the operating surgeon who has discovered a true ectopic thyroid gland: 1) Preservation of the thyroid tissue to avert the production of myxedema and the lifelong problem of more difficult control that would necessarily result from total thyroid ablation in childhood; 2) Parathyroid preservation, the loss of which could produce death or lifelong serious problems; 3) Consideration of the recurrent laryngeal nerve if any excessive and extensive exploration were carried out; and 4) Some maneuver to reduce the projection of the mass and thus improve the cosmetically objectionable midline tumor.

The ectopic thyroid gland should be cut in a mid-sagittal plane, either half being reflected outward and placed beneath the ribbon muscles of the neck, without disturbing any of the blood supply to the gland. In this way the thyroid tissue is functionally undamaged, the parathyroids are also undamaged (if any are in this area), and excellent cosmetic results are obtained because the mass of tissue has been pushed from its prominent position in the midline.

CASE REPORT

G. W. J., 4-year-old white girl, was referred by a pediatrician who had seen the

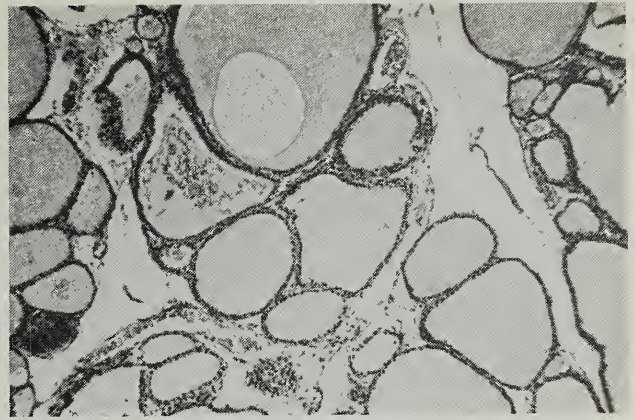


Figure 2. Photomicrogram of biopsy of ectopic thyroid gland of G. W. J. In general the pattern is slightly abnormal in that the follicles tend to be moderately dilated and epithelial lining is compressed. Follicles are filled with an abundant amount of eosinophilic colloid. There is practically no interstitial connective tissue present and no other significant alteration is noted. Dx: Thyroid, probably adenomatous goiter.

child for the first time. The mother stated that she had first noted this midline upper neck lump when the child was six or eight months old. By her description it was slightly less than 1 cm. in diameter at that time. She also stated that it had very slowly but progressively enlarged since that time, and that it had never become red or excessively tender. There had been no drainage at any time. The mother did believe that it enlarged slightly with each acute illness of any nature and with the slightest bruising. The pediatrician reported a perfectly normal growth and development pattern for this child.

Physical examination of the neck revealed a 1.5 to 2.0 cm. mass in the midline of the neck and at a level between the hyoid and thyroid cartilage. It was movable beneath the skin, nontender, retracted superiorly on deglutition and showed no evidence of past or present inflammatory involvement. There was no sinus tract opening of the skin. The mass felt quite solid. Transillumination was not carried out. The concurrent diagnosis was thyroglossal duct cyst.

At surgery on 3-2-59 a transverse incision was made at the level of the mass and the strap muscles of the neck separated. This mass obviously was solid tissue and not a cyst. It was attached to the thyrohyoid membrane and had an excellent blood supply entering it from both posterolateral regions.

This mass was partially incised in a mid-sagittal plane and a small portion removed

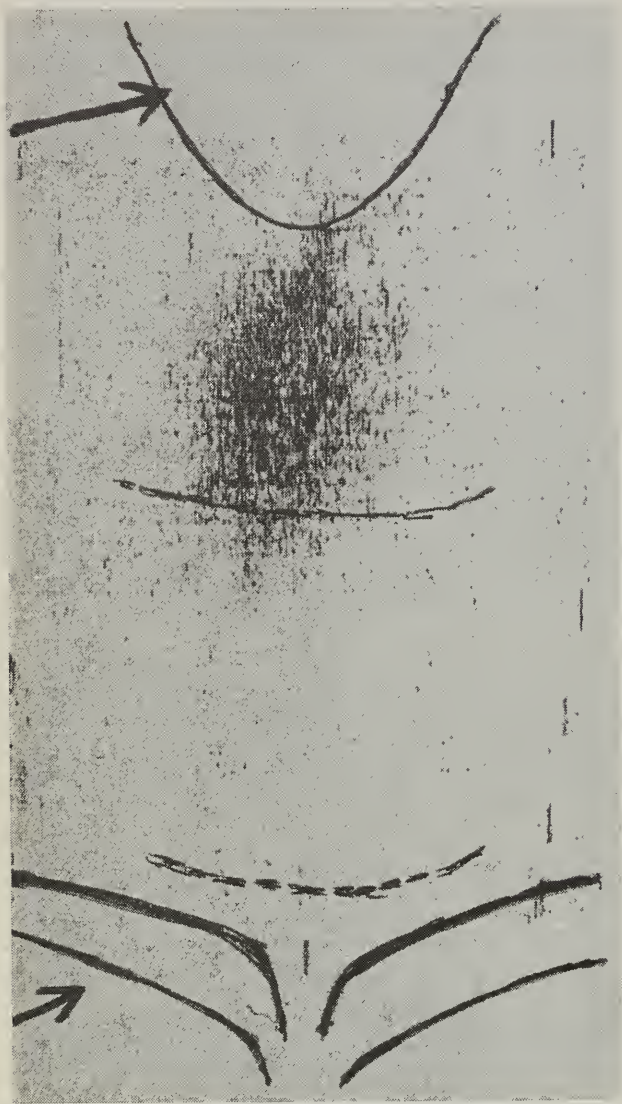


Figure 3. Scintigram of G. W. J., made on March 4, 1961, which shows that all I^{131} uptake is in the ectopic thyroid mass in the upper neck. Twenty-four hour thyroid I uptake is 36.6 per cent. Upper arrow marks chin and lower one marks right clavicle. Sites of two transverse exploratory incisions are shown.

for frozen section study. Immediately following this manipulation and incision of the mass, the child developed hyperpnea and a rapid pulse. The cut surface was of a homogeneous nature with no nodules. The pathologist reported that on frozen section study this appeared to be normal thyroid tissue. Next, a low transverse incision was made in the neck and exploration revealed no evidence of a normally placed thyroid gland.

The sagittal incision was carried to the posterior capsule in the previously described manner and each half reflected laterally beneath the strap muscles of the neck. There was no compromise of the blood supply and

an excellent cosmetic result produced. The final pathological report:

"Sections show thyroid tissue. In general the pattern is slightly abnormal in that the follicles tend to be moderately dilated and the epithelial lining is compressed. The follicles are filled with an abundant amount of eosinophilic colloid. There is practically no interstitial connective tissue present and no other significant alteration is noted (figure 2).

Dx: Thyroid, probably adenomatous goiter."

Ectopic thyroid gland should be expected to undergo any pathological change that normally placed thyroid tissue would undergo. A P.B.I. was obtained three to four weeks postoperatively and was within normal limits.

The necessity of close observation through the years was stressed to the mother, but six months later contact was lost temporarily. The child was seen again on March 4th, 1961, this being two years postoperative. At this time, the nodule, while still flattened, was at least 50 per cent larger and quite apparent. At this time the P.B.I. was within normal limits and the direct I^{131} uptake was 36.6 per cent. A scintigram was also obtained and as can be seen, the nodule truly represented the entire thyroid substance (figure 3).

The child's growth and development up to March, 1961, was normal, but clinically, she appeared slightly hypothyroid. She has been started on desiccated thyroid but at this date it is too early for follow-up observation.

CONCLUSION

The condition of ectopic thyroid gland of the midline of the neck has been briefly reviewed. The dangers and sequelae of removal of the ectopic thyroid have been presented. Proper therapy necessitates awareness of the situation and protection of the thyroid mass. It is suggested that in any questionable midline tumor of the neck that preoperative I^{131} uptake and scan be done to avoid the hazard of total thyroid ablation in the growing child.

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Evaluation of Newly Born Infants

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Techniques of infant evaluation and the nursing record discussed in this paper facilitate rapid identification of infants who are in trouble during the first few hours of life.

BIRTH AND THE immediate newborn period are accompanied by reorganization of the metabolic processes of the infant and by major changes in his vascular, pulmonary and central nervous systems. In normal newborn infants these physiologic changes are accompanied by a predictable sequence of physical signs,¹ however, many maternal and fetal factors may prevent the infant's smooth transition from intrauterine to atmospheric existence. In order to utilize the rapidly increasing knowledge concerning the diagnosis and treatment of newborn disorders, it is necessary to identify infants who are in trouble by developing and utilizing effective techniques for evaluating *all* infants during their first few hours of life.

The earliest significant advance in hospital observation of newborn infants was

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brought about by the establishment of infant nurseries. Later, separate nursery facilities were provided for prematurely born infants. The increased observation and improved methods for care of low birth weight infants have been rewarding. Concurrent with survival of more of these high risk infants has come a better understanding of both the pathologic and expected physiologic changes of all newly born infants.

Improvements in nursery facilities for larger infants have not always kept pace with those for the prematurely born infant. The establishment of "observation" and "isolation" nurseries for infants with suspected or proven infections has provided better care for other groups of infants at high risk. Yet, even in the same institution, the physical facilities and the number and training of nursing personnel provided for larger infants are frequently inadequate.

Recently there has been increasing interest in "recovery nurseries,"² or "intensive care nurseries," in which all newly born infants are kept under close surveillance during the first few hours after birth. In concept, the recovery nursery is similar to the surgical recovery room. Since few surgical procedures stress the patient more than the birth process, both prematurely born and term infants are observed carefully for early signs of distress. The size of the obstetrical service, the availability of nursing personnel and the physical plant of the individual hospital must be considered in selecting the location for intensive ob-

servation of newborn infants. In smaller hospitals with limited nursing personnel, these important observations may be effectively carried out in the delivery room itself. Where nursing coverage and facilities are optimal, the area designated for recovery observation should be a functioning part of the nursery units and should be located near the delivery room. This area may be a separate nursery or the admission nursery of either the newborn or premature unit. The recovery nursery should be well equipped, well lighted and constantly staffed by specially qualified and interested nurses. Abramson² has described in detail the design and equipment for the recovery nursery of a large hospital.

The techniques selected for evaluating newly born infants should facilitate the detection of difficulties that increase mortality during the first 24 hours of life, namely, anoxia, abnormal pulmonary ventilation and diffusion, congenital anomalies, infections, trauma and erythroblastosis.³ These techniques include a comprehensive maternal history; knowledge of labor and delivery, including signs of fetal distress; an immediate appraisal of the infant for depression; a rapid physical examination; and continuing observation from the time of birth until the infant exhibits the anticipated lability of an adjusted neonate.^{1, 4}

PRIOR TO BIRTH

As greater numbers of mothers and their offspring survive complicated pregnancies, the maternal obstetrical history, the labor history and evidences of fetal distress assume increasing importance in evaluation of the newly born infant. Although the causes of many fetal and neonatal disorders are not known, their relationship to certain maternal factors is well documented.^{5, 6}

MATERNAL HISTORY

Both chronic pre-existing and acute intrapartum maternal infections may extend to the fetus. Maternal infections may invade the fetus through the placenta (*e.g.*, hepatitis, herpes simplex, variola, varicella, rubella, rubella, coxsackie infections, toxoplas-

mosis, and cytomegalic inclusion disease). Local inflammatory processes may involve the placenta and fetal membranes as another source of direct fetal infection. Placentitis has significant association with prolonged cervical dilatation and with increased duration of labor after rupture of the membranes.⁷ In an indirect manner, maternal infection may manifest itself in the fetus by localization in the placenta and interference with fetal nutrition. Although less well understood, maternal infections not directly involving the products of conception may alter normal maternal and fetal health. The incidence of manifest and silent maternal pyelonephritis during pregnancy is greater than generally appreciated. Kass⁸ correlates significant bacteriuria during pregnancy with an increased rate of abortion and premature labor. Studies are currently in progress to evaluate the effect of bacterial toxins on uterine irritability and their influence on initiation of premature labor.⁹

Toxemias of pregnancy, as classified by the American Committee on Maternal Welfare, occur in six to seven per cent of all gestations.¹⁰ Acute toxemia of pregnancy is a third trimester disease that, in its severe form, many cause stillbirths, neonatal deaths and morbidity in surviving infants. In the offspring of mothers with severe toxemia, no characteristic microscopic lesion has been identified; however, these infants may show evidences of interference with fetal oxygenation including signs of intrauterine growth retardation and asphyxia. In addition, investigators have reported symptomatic hypoglycemia in a few infants born to toxemic mothers.^{11, 12} Maternal factors contributing to these fetal problems are premature onset of labor, abruptio placenta and placental insufficiency.

Endocrine disturbances during pregnancy may increase fetal loss or cause temporary or permanent abnormalities in the newborn patient. Although rare, congenital thyrotoxicosis has been reported in infants born to mothers with active thyrotoxicosis and to mothers whose symptomatology has been relieved by surgery or medications prior to delivery.^{13, 14, 15} Exogenous hormones and therapeutic agents used in the treatment of endocrine disorders during pregnancy are also of potential danger to the fetus.

With the discovery of insulin, maternal diabetes has become a more frequent gestational complication. As many as one-third of diabetic progeny may die during the latter half of pregnancy or during the early newborn period; however, risk to the diabetic mother has decreased. In an extensive review of the literature, Gellis and Hsia¹⁶ found that only two maternal factors, *i.e.* the severity of the maternal diabetic state and the degree of control during pregnancy, appear to influence fetal death. In addition to fragility and increased size for gestational age, the liveborn infant of a diabetic mother is prone to have cardiopulmonary and neurologic problems during the first 24 hours of life.^{16,17}

The pregnant cardiac patient and her infant now have an improved prognosis due to a better understanding of altered cardiopulmonary physiology and its management during pregnancy. Nevertheless, stillbirths, spontaneous abortions and premature labor continue to occur in mothers with untreated cyanotic congenital heart disease. Surgical problems may be an additional complicating factor during pregnancy, especially in the first and third trimesters.¹⁸ Since many factors may alter the normal physiology of pregnancy, all maternal diseases and pregnancy complications must be considered prior to birth of the infant.

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Labor should be observed continuously from its onset to complete birth of the placenta. Consideration is given to the duration and strength of labor, maternally administered drugs as well as trauma, cord problems and other labor complications. Depressant agents administered to the mother during the six hours before delivery are a potential threat to the neonate and there is increased incidence of neonatal depression when the induction-delivery interval of anesthesia exceeds 20 to 25 minutes.¹⁹ Following birth, the placenta is examined for various forms of degeneration, evidence of hemorrhage and, when indicated, for acute inflammation.

FETAL DISTRESS

Methods for evaluating the fetus prior to birth are limited. Changes in the fetal heart rate and passage of meconium before delivery are considered the most reliable signs of fetal distress; although, at the present time, there is lack of agreement as to their significance in all situations. When the fetal heart tones are first audible, the rate is approximately 160 per minute. Approaching term, there is an increase in irregularity of the fetal heart rate and a slowing to approximately 140 per minute. During the process of birth, it is not uncommon for the fetal heart rate to rise briefly to 180 or more.

Acute changes in fetal oxygenation may not be reflected in immediate fetal electrocardiographic changes;²⁰ however, tachycardia is usually considered to reflect acute asphyxia while bradycardia indicates severe myocardial depression. Hon²¹ has proposed that additional incidences of fetal bradycardia may be reflex in origin due to vagal stimulation. Experience with the fetal ECG suggests that this research tool may soon have wide application in evaluation of the intrauterine environment of the fetus. By use of the fetal ECG, life can be detected as early as the eleventh week of gestation; multiple pregnancies confirmed as early as the sixteenth week; the presentation of the fetus demonstrated; and fetal cardiac anomalies predicted prior to delivery. The ECG has been of reported benefit in polyhy-

dramnios, premature labor and marked maternal obesity.^{20,22}

The combination of an abnormal fetal heart rate and the passage of meconium prior to delivery is associated with varying perinatal mortality rates.^{23,24,25} The incidence of meconium staining of the amniotic fluid at any stage of labor is probably higher than is generally appreciated. Passage of meconium during labor in association with breech presentations does not have the same significance as staining of amniotic fluid in cephalic deliveries. Some clue to the duration of the presence of meconium in the amniotic fluid may be obtained by examining the vernix and nails of the newborn. Desmond and co-workers²⁶ found that staining of the nails occurs with four to six hours of exposure to meconium stained amniotic fluid and staining of the vernix caseosa occurs after 12 to 14 hours of exposure.

FOLLOWING BIRTH

Immediate and continuing appraisal of the newly born infant is necessary to determine the need for resuscitation and to detect medical and surgical emergencies requiring direct action. This evaluation begins in the delivery room.

IMMEDIATE APPRAISAL

Several methods have been suggested for the immediate evaluation of newborn in-

fants. Recently Miller and Calkins²⁷ emphasized that the time interval between birth and the onset of spontaneous, self-sustaining respirations is increased in sick infants. In 1953 the Apgar Scoring System²⁸ was proposed and now is in extensive use (table 1). This scoring system provides a rapid and accurate appraisal of the infant's cardiovascular, respiratory and central nervous systems within 60 seconds from birth. Scoring of the infant begins immediately after birth. The infant's heart rate is obtained by feeling pulsation at the junction of the cord and skin or the heart rate may be counted directly by placing a stethoscope on the infant's chest; reflex irritability is determined by the infant's response to suctioning of the nostrils and oropharynx with a bulb syringe or by gentle stimulation of the feet; and respiratory effort, muscle tone and color are observed during routine handling of the newly born infant following delivery. An Apgar Score of ten indicates that the infant, within 60 seconds of delivery, has cried vigorously, has assumed a flexion attitude, has grimaced or cried in response to stimulation and has good central oxygenation. A severely asphyxiated infant with the lowest possible Apgar Score (0) will have no heart beat, no respiratory effort, flaccidity, no response to stimulation and a blue or pallid color.

Apgar and James²⁹ have reported results using this scoring system on 2,715 infants born during the period 1952 through 1960. Of the 424 infants dying during the first 28 days of life, 52 per cent had scores of

Table 1. Apgar Scoring Method* for Evaluation of the Clinical Condition of Newly Born Infants

Sign	Score		
	0	1	2
Heart rate _____	Absent	Slow (below 100)	Over 100
Respiratory effort _____	Absent	Weak cry; hypoventilation	Good; strong cry
Muscle tone _____	Limp	Some flexion of extremities	Well flexed
Reflex irritability _____ (response of skin stimulation to feet)	No response	Some motion	Cry
Color _____	Blue; pale	Body pink; extremities blue	Completely pink

The five signs of the Apgar scoring method are evaluated separately 60 seconds after complete birth of the infant. Each sign is scored zero, one or two according to this schema.

*Apgar, V., Holaday, D. A., James, L. S., Weisbrot, I. M. and Berrien, C.: Evaluation of the Newborn Infant—Second Report. J.A.M.A. 168: 1985, 1958.

zero, one or two and 16 per cent had scores of eight, nine or ten at one minute of age. Although the Apgar Score does not provide an absolute prognosis for the individual infant, it serves as an immediate index of the clinical state of the newly born infant. The value of the Apgar Score is greatly augmented when combined with cumulative observations made during the first few hours after birth.

RAPID PHYSICAL EXAMINATION

The next step in evaluation of newly born infants is a rapid physical examination in the delivery room prior to transfer of the infant to the recovery nursery. The primary goal of this examination is to detect disorders of major threat to the infant's life with special emphasis on the discovery of congenital malformations. A systematic examination will allow detection of abnormalities requiring direct action and disorders requiring special observation or care after transfer to the nursery, as well as the detection of obvious malformation.

In order to conduct an effective delivery room examination and at the same time avert deterioration of the infant, this procedure should be conducted in a rapid and orderly manner utilizing readily available equipment. Equipment used for resuscitation constitutes adequate tools for detection of malformations in the infant. These pieces of equipment include oxygen and an oxygen mask, a pharyngeal airway, a laryngoscope with a premature blade, a soft catheter, a firm endotracheal tube, a mucus trap and a stethoscope.

The examination for malformations (figure 1) proceeds in an orderly cephalocaudal sequence. In the supine position, the infant is observed for multiple malformations, particularly those occurring in groups (*e.g.*, gonadal dysgenesis, mongolism). The head is observed for evidence of craniosynostosis and major malformations including anencephaly, microcephaly and hydrocephalus. The ears are observed for gross abnormalities and for location. The general characteristics of the facies are noted. In this rapid evaluation the eyes are examined, specifically noting position and size. The nares are tested for obstruction. Infants

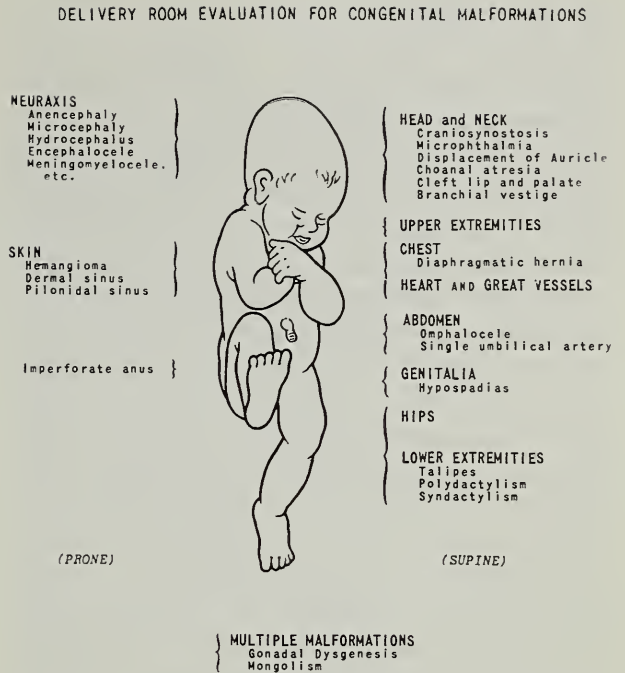


Figure 1: The delivery room evaluation for congenital malformations proceeds in an orderly cephalo-caudad sequence. A systematic examination of the newborn in the supine and prone positions will allow detection of malformations and additional abnormalities of major threat to the infant's life.

with complete bilateral choanal atresia have marked abnormality of respiration during the immediate Apgar evaluation; however, infants with obstruction of only one choana may be without marked respiratory symptoms in the early neonatal period. In order to rule out unilateral obstruction, partial or complete, it is necessary that the mouth and one nostril be covered while testing air movement through the other nostril using a stethoscope. The lips and palate are observed grossly for clefts. Additional obvious and critical malformations of the head, face, eyes, ears and mouth will be detected readily if the infant is observed in an orderly sequence. Due to the short neck of newborn infants, the chin should be lifted off the chest to check for cysts, branchial vestiges and other congenital defects. (At this point in the rapid examination, the clavicles are examined for evidences of fracture.)

The upper extremities are observed by comparing the size and length of one with the other. The digits of each hand are counted to detect even minor degrees of polydactylism, syndactylism and webbing. The chest is observed for gross malformation and asymmetry. A stethoscope is used

to detect cardiovascular and additional respiratory system abnormalities.

Prior to clamping, the umbilical cord is examined for the presence of an omphalocele. After the cord has been clamped and divided, the freshly cut ends are examined for vascular abnormalities and remnants of the urachus and omphalomesenteric duct. A high incidence of major congenital malformations has been reported in infants with absence of one umbilical artery.^{30,31} The abdominal examination also includes observation for hernias; auscultation for peristaltic sounds; and palpation for femoral pulsations, enlarged structures, (liver, spleen, kidneys, bladder) and the presence of abnormal masses. Although hypospadias is a common malformation of the external genitourinary system, other gross anomalies may be detected during this examination. It is our practice to keep the male infant with hypospadias without a diaper until one of our staff has observed the character and size of the voiding stream and location of the functioning urethral meatus.

The lower extremities are examined in a manner similar to that described for the upper extremities. In addition, the hip joints are examined for complete luxation (dislocation) and preluxation. Complete luxation of the hip joint is rare in the newborn period but it may occur alone or in association with other malformations including arthrogryposis multiplex, *spina bifida* or *pes equinovarus*. The lower extremities are observed for signs of asymmetry including limited degrees of abduction, leg shortening and differences in skin folds of the thighs. In infants with preluxation, dislocation may be produced by an abduction maneuver.³²

The infant is then placed in a prone position and examined for major malformations along the neuraxis. The head is observed for anencephaly, microcephaly, hydrocephalus and encephaloceles. The head and back are examined carefully for closure defects. The skin, particularly in the midline, is closely observed for the presence of hemangiomas, nevi and dermal and pilonidal sinuses. This rapid check is completed by examination of the anus. In our institution, it is the practice to obtain rectal tempera-

tures of our infants on admission to the recovery nursery. In hospitals using axillary temperature recordings, patency of the lower rectum should be assured by the rectal insertion of a rubber catheter to a depth of 2 centimeters.

CONTINUING OBSERVATION

The remainder of the recovery observation of newly born infants is accomplished in the recovery nursery. Transfer of infants from the delivery room to the recovery nursery is controlled with continuous observation of the infant during transfer. On admission to the nursery, premature infants and infants with obvious or suspected abnormalities are treated as directed by the physician. The apparently "normal" newborn infant (that is, the infant who has exhibited no deviations from the anticipated symptomatology of newborn transition) is placed, undressed, in a heated incubator facing the nurse. In order that the infant may be kept undressed, the incubator temperature is maintained between 84° and 86° Fahrenheit.

A *Newborn Distress Record* (figure 2) has been developed at the University of Oklahoma Medical Center for recording observations on "ill" infants and all "normal" newborn infants during their immediate recovery after birth. The normal newborn infant is received by the nursery nurse and identification of the patient is checked before he is weighed and placed in an incubator for continuing observation. During the admission procedure, the incubator temperature, the infant's temperature and his heart rate and respiratory rates are recorded and the patient is observed for cry, activity, color and character of respirations.

The infant is under close surveillance by the nurse during the first four to five hours of life. The position of the infant is changed frequently. Each time he is turned from side to side, the head is placed at alternating ends of the incubator in order that the patient faces the nurse at all times. The incubator temperature and the infant's temperature are checked at one to two hour intervals.

If the infant's condition is satisfactory at three hours of age, he is removed from the

Name: *Baby Boy Doe* Date: *8/27/63*
Unit No: *56-61-29* NRS: *Newborn*

Date	Time	Wgt.	Incu- bator Temp.	Infant Temp.	Heart Rate	Resp. Rate	Stool	Urine	REMARKS: (Treatments, Feedings, Observations, etc.)
<i>8/27/63</i>	<i>10:25</i>	<i>3402</i>	<i>86</i>	<i>96²</i>	<i>146</i>	<i>42</i>			<i>White male infant admitted from delivery unit. Sex and identification checked. Placed in incubator for observation. Cry strong. Active. Color pink & blue extremities. No respiratory distress noted. Alcohol applied to cord & eyes. Flushed & sterile water. Condition appears good. M. Jones, R.N.</i>
	<i>11:25</i>		<i>85</i>	<i>97</i>	<i>134</i>	<i>36</i>			<i>Asleep. Turned to opposite side.</i>
	<i>12:25</i>		<i>86</i>	<i>97⁴</i>	<i>140</i>	<i>40</i>			<i>Moving about. Condition appears good. Turned to opposite side.</i>
	<i>1:15</i>		<i>84</i>	<i>98</i>	<i>136</i>	<i>40</i>			<i>Breast given. No distress noted. Head used and returned to incubator.</i>
									<i>Head off and lid open.</i>
	<i>2:30</i>			<i>97⁶</i>	<i>138</i>	<i>44</i>			<i>Stable. Placed in crib on abdomen. M. Jones, R.N.</i>

Figure 2: The Newborn Distress Record was developed at the University of Oklahoma Medical Center to be used for recording observations and treatments of newly born infants and infants during distress.

incubator and bathed. The bath serves the useful purpose of a test stimulus. If there is no marked change in the infant's condition during the bath, he is dressed and placed on his stomach in the incubator with his face toward the nurse. The vital signs are checked again and the nurse observes for respiratory distress, color, cry and activity. The incubator heat is turned off and the lid is opened. At this time a nursing note is entered on the *Newborn Distress Record*. One hour later the infant is again checked by the nurse. If there has been no change in the infant's condition and if his temperature has remained stable, he is transferred to a crib and the intensive recovery observation and the *Newborn Distress Record* are discontinued. The remainder of the nursing notes are recorded on abbreviated nursing record forms.

DISCUSSION

The early detection of disorders in newly born infants requires an accurate knowledge of the normal characteristics of fetal and neonatal life. During the past decade remarkable progress has been made in the attempt to define clinical and biological normalcy of the fetus and the newborn patient. Birth and the immediate newborn period are accompanied by many dynamic

changes and the signs of disease are frequently difficult to differentiate from the rapidly changing signs that accompany these physiologic readjustments. In 1963 Desmond and co-workers^{1,33} tabulated information derived from careful observation of "standard," or normal, newly born infants. Although wide ranges of behavior were noted during the first six hours following delivery, these authors describe an underlying orderly pattern of clinical changes in these infants which could be related to time and other physiologic events.

Due to the characteristic instability of the normal newborn, several authors^{1, 27, 34} have stressed the need for augmenting the delivery room appraisal and the physical examination with continuous or serial observations. Lubchenco³⁴ states that "knowledgeable intuition" is based on specific observations. At her institution, a list of signs has been compiled including minor deviations from normal clinical behavior. This "jot sheet" is used as a cumulative record of the infant's behavior.

At the University of Oklahoma Medical Center the procedures selected for evaluation newly born infants include a comprehensive maternal history; continuous observation of labor and delivery; immediate appraisal of the newborn infant for depression; a rapid physical examination; and continuing observations after transfer to the recovery nursery. The recovery observation of infants without clinical disease has ranged from four to five hours. These procedures have been effective in the early detection of neonatal morbidity and in identifying infants with major disorders leading to death within the first few days of life.³⁵

SUMMARY

Close cooperation and coordination of efforts by the hospital staff, both medical and nonmedical, are necessary to accomplish the task of early detection of abnormalities in the fetus and the newly born infant. Effective techniques for evaluating newly born infants include a comprehensive maternal history; knowledge of labor and delivery, including signs of fetal distress; an immediate appraisal of the

infant for depression; a rapid physical examination, and continuing observation from the time of birth until the infant exhibits the anticipated lability of the adjusted neonate.

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WHERE THE MONEY GOES

The Tax Foundation, Inc. provides the following breakdown of Federal income taxes on a \$6,000 annual income, using the proposed 1964 national budget as a guide:

National Security	\$362	Commerce and Housing	20
Interest	61	International Affairs and Finance	16
Agriculture and Agricultural Resources	35	Natural Resources	15
Veteran's Services and Benefits	34	General Government	13
Labor and Welfare	34	Other	10
		Total	\$600

ABSTRACTS

CEREBRAL BLOOD FLOW ASSESSMENT WITH A RADIOISOTOPE METHOD

Utilizing radioiodinated serum albumin, the author reports on cerebral blood flow as measured by externally placed gamma ray detectors. The results are expressed in arbitrary units as "Flow Index."

In 51 normal subjects between the ages of 19 and 70, the mean flow index for the left side of the head was 15.7 with a standard deviation of 3.1. The right side showed a flow index of 16.8, standard deviation 3.5. There was no significant difference between normal subjects over 50 and those under 50. Inhalation of five per cent carbon dioxide for five minutes produced increased flow indices. Thirty two patients with evidence of arteriosclerosis of a common carotid artery or its major branches were studied. Nineteen had cerebral infarcts. The mean flow index on the infarcted side was 10.8, standard deviation 3.3. In all cases the infarcted side was lower than the normal side. Side to side differences were from 2.5 to 10.2. In only two of the 19 was this difference as low as any found in the normal group. In the remaining 13 each had experienced one or more transient attacks of cerebral ischemia with hemiparesis. All were intact neurologically at the time of the measurements. The flow indices of the two sides did not differ significantly. Measurements made on five patients with arteriovenous malformation showed marked elevation on the involved side.

Cerebral Blood Flow Assessment With a Radioisotope Method, Stephen W. Thompson, M.D., Archives of Neurology, Vol. 10: 12-20, January, 1964.

MAGNESIUM DEFICIENCY IN THE SURGICAL PATIENT

The author reports on seven cases of post-operative magnesium deficiency. Symptoms observed were hyperreflexia, tremor with disorientation and confusion in most of the cases. Hallucinations occurred in three and convulsions in two. Hyperacusis and bilateral vertical nystagmus were noted in a patient with the lowest serum magnesium. Cardiovascular changes in four patients consisted of tachycardia, acute hypertension or both. The factors postulated by the author that contributed to the magnesium deficiency were fluid loss, alcoholism or the infusion of alcohol, administration of calcium, and possibly pre-existing dietary deficiency. Failure of gastro-intestinal absorption was an added factor in at least one patient. Administration of adrenal steroids and the surgical procedure itself were not believed to be factors. The role of potassium in magnesium deficiency remains to be defined. All of the patients were receiving intravenous potassium therapy. The author suggests that potassium may aggravate magnesium deficiency in a manner analogous to its known effect in producing

tetany in hypocalcemic and hypokalemic patients in whom potassium only is replaced.

Magnesium deficiency can be prevented by the intake of eight mEq of magnesium a day in the intravenous fluids. In situations of depletion, magnesium can be replaced by intra-muscular or intravenous magnesium sulphate.

Magnesium Deficiency in the Surgical Patient, William O. Smith, M.D., The American Journal of Cardiology, 667-670, Nov., 1963.

RECENT PUBLICATIONS

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Modification of Sunburn by Infrared Rays, Mark A. Everett, Charles K. Doran, Howard D. Everett, The Journal of the American Medical Assoc., 186: 778-779, 1963.

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In Vivo Incorporation of D-Glucosamine-1-C¹⁴ into Acid Mucopolysaccharides of Rabbit Liver, Jerry C. Capps, and M. R. Shetlar, Society for Exper. Biology and Medicine, 114: 118-120, 1963.

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Determination of blood loss during full-mouth extraction and alveoloplasty by plasma volume studies with I¹³¹-tagged human albumin, Michael N. Spengos, Oral Surgery, Oral Medicine and Oral Pathology, Vol. 16: 176-183, March, 1963.

Reprints of the above publications are usually available on request from the senior author, c/o Mrs. John Campbell, Veterans Administration Hospital, 921 N.E. 13th Street, Oklahoma City, Oklahoma.

Physical Activity --Its Preventive and Therapeutic Aspects

JOHN NAUGHTON, M.D.

THE GRADUAL REALIZATION that sedentary men have a greater incidence of clinically manifest coronary heart disease than their physically active contemporaries has prompted investigators to inspect the physiological, psychological and biochemical aspects of physical activity more closely.

Retrospective evidence from clinical and post-mortem studies clearly indicates that regular physical activity has a role in the prevention of this disease. The mechanism of this prevention is not understood, but it is known that the incidence of coronary heart disease is lower in physically active men regardless of their social class. A possible explanation might be that these men fail to succumb to the "law of urbanization" — *excessive caloric intake with decreased energy expenditure*. Some effects of adherence to this method of survival are obesity, hypercholesterolemia and chronic psychological and physiological fatigue. Raab has coined the term adrenergic preponderance to describe the features of this physiological condition. These effects which, when found in combination with one another, predispose an individual to a greater likelihood of having coronary heart disease, can be reversed by the institution of regular physical activity.

The accumulation of this type of epidemiological evidence has provided the stimulus for a therapeutic appraisal of physical conditioning. Osler and Holmgren demonstrated its value in treating neurocirculatory asthenia in past years. Recent studies have attempted to elucidate its value in the care of patients who have recovered from myocardial infarction. The utilization of objective laboratory measures has made it possible to evaluate patients before and after a period of physical conditioning.

During the past year 18 men with well-documented episodes of myocardial infarction have volunteered for physical conditioning programs in Oklahoma County. The data accumulated from periodic work capacity evaluations indicate that relatively asymptomatic patients without serious complications (heart failure, arrhythmias, etc.) from the underlying disease process respond to physical conditioning in the same manner as presumably healthy men. Following training, resting blood pressure, pulse rate and serum cholesterol concentration are lowered, work is accomplished more efficiently and there is an improved state of well-being.

It would be premature to judge whether such an approach will alter the clinical course of these patient's underlying illness. Hopefully, they will continue a long-term training program that will enable investigators to arrive at valid conclusions ascertaining whether the approach is beneficial, detrimental or neither.

It can be hypothesized, however, that patients treated in this manner might have two advantages over the sedentarily treated cardiac patient:

- 1) New collateralization of the coronary artery circulation might be stimulated to develop. There is evidence that exercise promotes the development of collateral circulation in dogs after their anterior circumflex coronary artery has been ligated. Direct methods to prove or disprove this in man are not yet satisfactory.
- 2) Treating patients as "normal individuals who have recovered from a serious illness" should promote a healthy psychological outlook in a type of patient who is otherwise often pre-disposed to a form of "psychological invalidism" characterized by features of depression and hypochondriasis. □

From the Department of Medicine and the Neurocardiology Research Program of the University of Oklahoma Medical Center, Oklahoma City, Oklahoma.

Produced under the auspices of the Professional Education Committee of the Oklahoma State Heart Association.

The Cost of Professionalism

AUSTIN SMITH, M.D.

A PROFESSION in the dictionary is defined as "a calling superior to a mere trade or handicraft." It also is defined as "a vocation," and "the collective body of persons engaged in such calling." Professional is defined as "engaged in a profession." I suppose that by adding "ism" to professional we would have not only the word professionalism but also could prepare our own definition which might mean "the act of promoting the concepts of a profession."

Somehow these definitions seem out of step with the times. Almost anyone can shape his way of life so that it assumes the element of dedication that a profession is supposed to reflect. Teachers are professional people. So are members of the clergy. So are pharmacists and physicians. So are many others.

If one defines a profession in the commonly accepted terms he would find a population mix somewhat as follows:

Physicians	259,000
Pharmacists	124,000
Dentists	104,000
Lawyers	285,000
Teachers	1,521,600
Professors and instructors	177,000

They make up only a part of the general population now considered to be about 191,000,000. But they make up a very important part of the population because of their special training, their influence in community and educational affairs and the respect they can engender if they pursue

with dedication their calling. To do so, though, is not without a considerable cost that involves more than money. There is the cost of the basic education, of course, but there also is the sacrifice of earned income while the education is sought, and later the subsequent sacrifices sometimes in income and certainly in time from family and personal affairs. However, this is part of the cost of professionalism. When leadership is possible and aggressively taken it cannot be without some sacrifice. And in our country there is great need for continuing leadership by specially trained people, such as those in the professions, and as has been so important in past decades during the growth of this country. If the professions fail to continue to contribute to leadership they, like the population as a whole, will become subject to government control such as exists in other countries. And I do mean control by, and not partnership with.

During 1964 people throughout much of the world will be paying homage to the memory of William Shakespeare, whose 400th birthday was honored recently. Well, another birthday should be remembered. This year—1964—is the twenty-first birthday for the withholding of income tax from pay checks. It began in 1943 with a five per cent "Victory" tax which was imposed to help siphon excess purchasing power. In the same year the withholding rate was boosted to 20 per cent. The rate was reduced in 1945 to 18 per cent, and in 1948 to 15 per cent. But in 1950 it went back up to 18 per cent, then set at 20 per cent to run to 1954, when it was reduced to 18 per cent. It is now at 14 per cent.

This address was presented by Doctor Smith, President of the Pharmaceutical Manufacturers Association, at the Annual Convention of the Oklahoma Pharmaceutical Association at Tulsa, Oklahoma, May 7th, 1964.

In addition, another birthday was reached recently. On October 3, 1913 — about fifty years ago—President Woodrow Wilson signed the Federal income tax law. Under the provisions then corporations paid one per cent and rich individuals as much as six per cent taxes. Last year, fifty years later, the maximums were 62 per cent for corporations and 91-92 per cent for individuals.

What does such taxation mean? Many things. Consider for example just one part of our federal government and what it provides through money derived from taxes. This year twenty million persons will receive Social Security payments. An additional million families will receive an average of \$129.00 per month in aid to dependent children. Another seven million are receiving federally supported relief payments.

To date, more than 7,000 hospitals and health centers have been built with aid from the Hill-Burton Act. Forty per cent of medical research projects have some federal support. About 500,000 students have been helped with federal funds during the past six years.

Such largesse is possible through the Department of Health, Education and Welfare, an agency that when assembled in 1953 had 39,000 employees and a budget of not quite two billion dollars. Last year it had more than 80,000 employees and a budget of more than five billion dollars. This year there are 86,000 employees with a budget of more than six billion dollars. The target for 1965 reflects more than 90,000 jobs and seven and a half billion dollars.

The work of the Department of Health, Education and Welfare obviously makes possible additional political recognition for many Congressmen back home as well as furnishing control over multi-billion dollar industries such as drugs and foods. It even has a hand in the building of sewage treatment plants. Other possibilities, such as air pollution control, are too numerous to mention. I am not disputing the value of some of this "work"; I am merely directing attention to the size and breadth of activities of only one federal department.

Let me present the role of government in our daily affairs in another way. The population of this country is now about 189 million. The gross national product is not quite 600 billion dollars with personal income being more than 450 billion after taxes and compulsory levies. Of this income, about six and one-half per cent is derived from federal or federally assisted social insurance and related payments, including unemployment and disability compensation. More than 18 million people receive monthly checks under the Social Security program. More than five million people receive free surplus food.

Why these figures? Simply to remind members of this audience that contrary to what some planners for our society maintain, we already have a social-welfare program. I am not saying we should or should not have such programs, but I always have maintained, and still do, that we should help those who cannot help themselves, although I distinguish these from those who do not want to help themselves. There is a difference. I am merely reminding you of what exists today. Some problems arising today in the health field rest not on the word "when" but on "how much." For it is the growth of legislative and regulatory control of our way of life that presents as many problems as those created by temporarily unmet needs. And you and I through taxation are helping to further the extension of such control on the one hand as we try independently on the other to erase the needs of our fellowman.

This is part of the cost of preserving the concepts and the good of professionalism.

As I view the current situation, I find the problems have a way of multiplying like unicellular organisms which multiply without reason other than the presence of satisfactory growth conditions. Political ambition, decisions by uninformed government personnel, and loose statements by members of the health professions can initiate difficulties and cause them to multiply almost endlessly, but these can be overcome with facts, persuasion and persistence. Time works in the favor of those who are and want to be informed. But there are too many who consider the perimeter of a problem rather than its setting. They look at an

isolated problem facing man rather than at man in his environment. And yet it is man's environment today that is causing many of his problems.

It is impossible to single out any one segment of the complex health picture and treat it separately without expecting the other segments to be affected. Government officials, pharmacists, physicians, legislators, members of the armed forces, hospital administrators, insurance planners, educators, name whom you will, all are involved. And it is impossible to confine a widely publicized activity to one area; it will spread from the federal scene, to state, to community, even abroad to foreign shores, and then back again. This is inevitable when an emotionally charged issue such as health is involved.

Recently I read an item about the manipulation of words. It concerns a road race between an American car and a Russian car. The American car easily won this two car race. But when it was mentioned in a Communist newspaper the report was as follows:

"The Russian car finished second.

The American car finished next to last."

Sometimes I wonder if we in the health field and in private enterprise will ever win the battle against conviction by deception. I truly believe that all of us should be big enough to admit our mistakes and in most instances we are, and yet day after day the press carries headlines that convict us by their wording without a chance for us to reply or receive equal treatment. And so often headlines really do not reflect the substance of the articles.

Failure to use ably the knowledge that is available today is an inexcusable fault. Even under the most helpful circumstances today's information may be difficult to utilize because science sometimes outruns the understanding of those who can benefit the most from its blessings. There are many who do not understand what is new and how to use it and so become confused. Thus, since it is not unusual to be afraid of that which is not understood, there is hesitancy to accept the new and failure to view it in its proper perspective. If we who are supposed to be informed people in the health field do not continue to learn and interpret

and share we can only blame ourselves for some of the problems that arise through ignorance.

If such symptoms of unrest were evidence of only carping criticism I would treat them less seriously and try to shrug them aside as one brushes off mosquitoes until repellents and larvacides are put to work. Unfortunately, though, this constant drumming of a central theme has a hypnotizing effect and in time many succumb to the brandishments of the tune makers. Deliberate misrepresentation, careless and thoughtless repetition, failure to check on alleged facts, and constant displays of sensationalism encourage more and more public dependence on the growing paternalism of an already greedy government. It effectively influences an inherent public desire to be babied and cuddled and led from the cradle to the grave, through all of life's opportunities and challenges in education and employment, in sickness and in health, and in security from salaries, to food, to housing. This is evident in states as well as in Washington, in fact, throughout the world.

Increasingly identified with this growth in government paternalism are the attempts of government through its legislative bodies and regulatory agencies to tell the professions what to do, when to do it and how to do it. I charge that this is deliberately fostered in speeches, hearings and even press releases. A deliberate choice of words that implies failure by a profession to understand the new and useful, or inability to make judgments, or lack of knowledge about need for certain treatment measures is being pursued persistently, perniciously and effectively in many quarters in my opinion. At the rate this problem is developing it will be only a matter of time before a government will produce a master list of drugs designed for the majority but not for all of those who are ill, and built on a premise of price before quality. For the life of me, I cannot see the logic of such insistence by those who some day in their own illness might be adversely affected by the shortcomings of their earlier demands.

Lest there be any doubt about my belief in a role for government, I want to emphasize that I think it should provide a helping

hand—but not a dominating one. It should be a pilot, not the captain of a ship. It should be a member of the team, not the owner, in fact, in my judgment, not even the manager or coach. This does not mean I am advocating constant criticism of government interventions since sometimes these arise because we who could have helped stood by silently. As an example, I cannot see the Food and Drug Administration as the ultimate therapeutic advisor, but we are inviting it to become just that if we do not assume our individual obligations and if we do not insist that the F.D.A. limit its activities to those it rightfully should pursue. And we should insist that it follow commonly accepted concepts such as the right of appeal. So, in my judgment, government representatives should not tell the professions how to practice, instead they should merely help insure dependability concerning items of substance when the professional man must exercise his judgment. Government can offer guidelines for legal questions, but it should not be the source of decision for questions involving ethics, etiquette or professional judgment. If professional people are not able to face up to these aspects of our society then there is something wrong with our training and our philosophy.

I have yet to see any desk-bound administrator or full-time politician who knows as much about the needs of a body as does the person who attends that body on an individual basis hour after hour. Concern and caution are advisable, of course, for all—drug maker, drug prescriber, drug dispenser and drug user. But when lay judgment is substituted for professional judgment, when the sick refuse to take what is wisely prescribed, when consumer representatives and motivation hunters try to resolve medical problems without medical knowledge, when the medical profession is notified of government interventions in drug use through the popular press rather than through normal professional channels, when the public receives medical information about drug reactions before the profession is informed, the already ailing members of the public will suffer even more. In fact, they will suffer more than any other group since it

will be their own bodies which are deprived of needed medical counseling and remedies.

Again, so that there is not any uncertainty about my views on progress, I want to make it clear that I am in favor of progress in the health field regardless of its source, be it private enterprise, a government or a foreign country. But I am opposed to obstacles and changes that will hinder progress for this country and its people. There may be honest differences of opinion concerning what is progress and what is an obstacle and this I will respect.

This is the time, then, for educational leadership and public reassurance concerning medical care, including drug therapy. This is the time to define the basic issues so that all problems can be put in their proper perspective. Otherwise we may become lost in a maze of minor issues while the major areas serve as an excuse for drastic and unwise changes in our medical care, educational, business and professional programs. Drug manufacturers cannot reassure the public about some currently exciting accusations without being accused of selfish interests. And when they dip too deeply, even though unselfishly, into medical educational efforts they are criticized by medical educators. Pharmacists also are hard pressed to assume leadership in reassuring the public since they too can be accused of selfish interests. Obviously pharmacists and drug manufacturers should do what they can in this area of public and professional education and reassurance, but they are limited in their efforts by the nature of their work. Industry has a role as does pharmacy, but the most effective role of leadership for educating the public concerning health matters, may best be left, I believe, to the medical profession. It has, I believe, a profound obligation to assume such leadership. However, it should actively seek and take the help of allied members of this health team. It should not operate alone in health matters except when it is involved in matters unique unto itself. The Pharmaceutical Manufacturers Association, for example, is willing to assume an even more active role than it now holds but it believes that none of us can wait too long. If the professions do not aggressively meet their obligations singly and collectively, the government will do it for them.

Security, like liberty, however, has never come from government but from its subjects. The history of security, like liberty, is a history of limitations of governmental power, not the increase of it. With the record of history behind us, it seems to me that the future rests on this history of the past, the immediate being merely a bridge to permit crossing from the past to the future. And as we profit from our earlier lessons we should be molding our convictions and marshalling our forces to support these convictions. This may not be easy at times but it is essential if this country and its possi-

bilities are to continue to achieve world recognition. I beg those on the health team to remember their responsibilities as professional people and as citizens and then to do something about them individually and collectively. As another person said "Don't find a fault, find a remedy." And as someone else long ago pleaded "Give us the courage to stand for something lest we fall for anything."

Courage is part of the cost of subscribing to professionalism. □

1155 Fifteenth St., N.W., Washington, D.C.

TEST FOR DIAGNOSIS OF PHEOCHROMOCYTOMA

A simple new test for the diagnosis of pheochromocytoma, a secreting tumor that causes a potentially curable form of high blood pressure, has been developed by scientists of the Public Health Service, U.S. Department of Health, Education and Welfare. The test is safe, reliable, and easy enough to be done in any doctor's office.

Doctors Karl Engelman and Albert Sjoerdsma of the National Heart Institute* report that tyramine injections produce a much greater blood pressure rise (pressor response) in patients with pheochromocytoma than in normal subjects or patients with essential hypertension.

The most reliable diagnostic test for pheochromocytoma is measurement of catechol amines and their metabolites in the urine, but this cannot usually be done as an office procedure. The histamine pressor test currently in clinical use is not always accurate and may cause severe side effects. The tyramine pressor test, devised in the NHI Experimental Therapeutics Branch, appears to circumvent these difficulties.

The test begins with injections of saline (to insure that the patient's blood pressure is not responding to the needle or psychological factors). After blood pressure has stabilized at pre-injection levels, 250 micrograms of tyramine is administered. If this does not raise blood pressure by 20 mm./Hg or more, the dose is increased to 500 and, if necessary, to 1,000 micrograms. If any of

these doses raises blood pressure by more than 20 mm./Hg, the patient probably has pheochromocytoma. The diagnosis should be confirmed by tests for urinary catechols and metabolites.

In these studies, a dosage of 1,000 micrograms of tyramine most effectively singled out patients with pheochromocytoma from among normal or hypertensive subjects. In patients with pheochromocytoma, this dosage raised blood pressure by an average of 42 mm./Hg. In contrast, the mean increase was 5 mm./Hg in the hypertensives and only 3 mm./Hg in normal subjects.

Usually, blood pressure began to rise within 45 seconds after injection, reached a peak within one-two minutes, and subsided within five-eight minutes. The only symptom noted by any of the subjects was a transient sensation of heartbeat in those whose blood pressure rose by more than 40 mm./Hg. The scientists observed no evidence of toxicity in more than 500 tyramine injections in 57 subjects.

Tyramine raises blood pressure by releasing norepinephrine from tissue storage sites. This pressor response is greatly enhanced in patients with pheochromocytoma probably because their tissue storage sites have become extremely well stocked, perhaps supersaturated with norepinephrine as a result of taking up the amine being intermittently or continuously discharged into the blood by the tumor.

These findings were reported recently at the meeting of the American Federation for Clinical Research in Atlantic City. □

*The National Heart Institute, located at Bethesda, Md., is one of the nine National Institutes of Health of the Public Health Service, Department of Health, Education and Welfare.



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OMPAC-AMPAC Move Forward

Oklahoma Medical Political Action Committee establishes permanent Oklahoma City headquarters office, hire full-time staff, and begins accelerated educational and fund raising activities.

Mark Twain once commented that "Everybody talks about the weather but nobody does anything about it."

Until a few years ago, the same could be said of the political climate. Then the AFL-CIO pioneered the concept of a political action committee. Designed to translate the group's political and social ideology into the practical form of congressional representation, the unions' Committee on Political Education (COPE) has been highly successful in electing Congressmen and Senators who will generally support organized labor's point of view on key national issues.

While labor succeeded in building a great liberal voting bloc in the nation's capitol, the political fortunes of more conservative groups waned.

The American Medical Association came to life in 1961 when its House of Delegates endorsed the creation of the American Medical Political Action Committee (AMPAC) and encouraged the establishment of similar committees at the state level.

The Oklahoma Medical Political Action Committee was formed in 1962 with the approval of the Oklahoma State Medical Association's House of Delegates. Like AMPAC, it is a voluntary, nonprofit, nonpartisan, and unincorporated political action committee organized, according to its constitution and by-laws:

1. To promote and strive for the improvement of government by encouraging and stimulating physicians and others to take a more active and

effective part in governmental affairs.

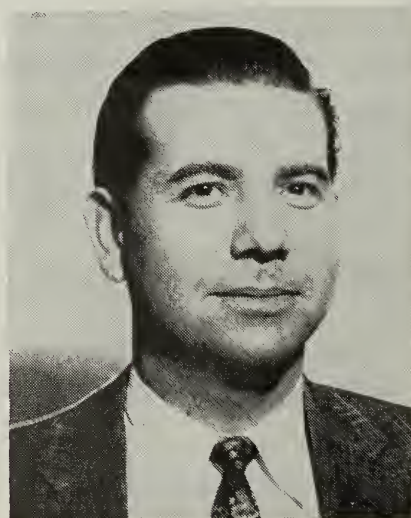
2. To encourage physicians and others to understand the nature and actions of their government, as to important political issues, and as to the records, office holders and candidates for elective office.

3. To assist physicians and others in organizing themselves for more effective political action and in carrying out their civic responsibilities.

4. To do any and all things necessary or desirable for the attainment of the purposes stated above.

How have these organizations fared in the rough-and-tumble political world?

AMPAC has emerged as a worthy contender in its bouts with more experienced political action committees. In the 1962 national elections, AMPAC supported candidates for the House of Representatives in 30 congressional districts. Although labor's COPE supported opposing candidates in these districts, AMPAC-backed candidates won 25 out of the 30 seats. In the five losing races, the margin



LEROY BRIDGES

of loss was small, averaging less than two per cent of the vote.

AMPAC has also made great progress in the field of political education (as contrasted to direct candidate support); through the production and distribution of educational leaflets, manuals, newsletters and award-winning training films.

OMPAC's progress has been slow, but steady, and recent months have seen a great surge in interest on the part of Oklahoma physicians and wives.

OMPAC Packs Pep

The prospects for OMPAC have never looked better.

A full-time, well-qualified executive director has been found and a modern office has been established at 4400 North Lincoln, Oklahoma City. The spirit of good citizenship and recognition of the need for political action are catching on, and new memberships from physicians and their families are being received daily.

Executive Director Leroy Bridges came to OMPAC from the Oklahoma Farm Bureau where he specialized for many years in legislative and political education activities. He has also worked at high levels in major political campaigns within the state, and is considered one of the state's outstanding political analysts.

Bridges says the outcome of the 1964 general elections will greatly influence the future course of health legislation, and he points out the need for "the immediate enrollment of hundreds of doctors and wives as volunteers in the cause of better government."

"We are a little late to get rolling," he said, "but not too late to be effective this year and to greatly increase our stature and importance in the years to come."

How OMPAC Works

OMPAC is controlled by a 15-member Board of Directors consisting of two elected physicians from each of Oklahoma's six congressional districts, two physicians' wives who are elected at large, and one medical student. The present state chair-

man is William A. Matthey, M.D., Lawton.

The organization's activities are generally divided into two categories, political education and candidate support.

First, through education, OMPAC serves its members by supplying such assistance as voting records, information on party organizational structure, a scheduled publication, and how-to-do-it materials on candidate support, precinct action programs, and voter registration drives.

Secondly, OMPAC follows proven campaign techniques and selects candidates for support on a realistic, nonpartisan basis. Target areas are chosen after thorough analysis at the local and congressional district levels; after consideration of the candidate's voting record and political principles; and, after a complete study of the many factors that determine his chances of winning.

OMPAC also coordinates its efforts with those of other groups—both medical and non-medical—which are actively engaged in working for better government.

Dues and Contributions

There are two basic sources of financing for the Oklahoma Medical Political Action Committee.

Primary support must come from the dues of individual members. A sustaining annual membership in OMPAC is \$99.00 or more per year, and the same type of membership is available at the same price in AMPAC. The OMPAC leadership is encouraging membership in both the state and national political action efforts "since our goals cannot be achieved if our interests are confined to the boundaries of Oklahoma."

While it is hoped that most physicians will select the classification of "Sustaining Member," active memberships in OMPAC and AMPAC are available for contributions of \$10.00 to \$98.00 per year.

Another basic source of revenue is the contributions of businesses and corporations to the educational activities of OMPAC. The Federal Corrupt Practices Act prohibits corporations

from engaging in national elective campaigns, but the law does not prevent corporate groups from contributing to political education activities.

Thus, OMPAC leaders are hopeful that an appropriate portion of its overhead and all of its research and political education activities can be financed by contributions from business and industry, leaving the individual dues funds free for direct support to political candidates.

"OMPAC is a responsible citizenship organization which has been born out of necessity," Bridges says, "and it is tailor-made for the physician who wishes to do something about the 'political weather,' not just complain about it."

Further information about OMPAC can be obtained by writing directly to the Oklahoma Medical Political Action Committee, Suite 75, 4400 North Lincoln Boulevard, Oklahoma City, Oklahoma. □

Tulsa Medical Society Awards Ten Scholarships

Ten scholarships totaling \$2,500 were awarded recently to Tulsa County students of medicine, nursing and medical record science by the Scholarship Fund of the Tulsa County Medical Society.

The winners, seven girls and three boys, as announced by Doctor William M. Benzing, Jr., President, are:

Harrison Gordon Butler, 20, 219 East 19th, freshman at the University of Oklahoma School of Medicine, \$300; Judith Bowman Myers, 20, 1436 South Oswego, sophomore at the University of Oklahoma School of Medicine, \$300; James M. Shultz, 21, 4706 East 40th, freshman at Southwestern Medical School of Dallas, \$300; Verne A. Smith, Jr., 22, 133 East 43rd Place, freshman at the University of Oklahoma School of Medicine, \$300; Ann Tardiff, 20, 1363 East 43rd, freshman at the University of Oklahoma School of Medicine, \$300; Loretta Faye Sides, 18, 832 North Trenton, Hillcrest Medical Center School of Nursing, \$200; Marline Marie Lairmore, 18, 3214 South

New Haven, St. John's Hospital School of Nursing, \$200; Patricia Ann Kelley, 17, 518 West Quincy, Broken Arrow, freshman at Oklahoma Baptist University School of Nursing, \$200; Betty Jean Trammell, 17, 1207 West Admiral, Hillcrest Medical Center School of Nursing, \$200; and, Redith Rae Kilgore, 20, 1611 South Indianapolis, School of Medical Record Science, Indiana University Medical Center, \$200.

The awards, first to be made by the newly-created trust fund, utilize a grant of \$31,500 from surplus funds of the mass immunization for poliomyelitis conducted last year by the Tulsa County Medical Society.

Doctor Benzing said the winners were selected from 31 applicants with reference to both need for financial assistance and previous scholarship records. The scholarships are limited to Tulsa County residents who are now enrolled or have been accepted for enrollment in accredited schools of medicine, dentistry, nursing, medical technology or allied medical sciences.

Scholarships will be awarded each year. Present plans call for distribution of \$2,500 annually from the fund.

Winners are being notified by mail and advised of the method of payment, Doctor Benzing said. He said the selection had been difficult due to uniformly high scholarship records and commendable objectives in medical careers by all applicants.

The Scholarship Trust Fund of the Tulsa County Medical Society is administered by a Board of Trustees comprising Doctor Benzing, Doctor Francis W. Pruitt, Doctor Harlan Thomas, Doctor Walter E. Brown and Doctor Worth M. Gross.

In addition to the \$31,500 used to establish the trust fund, the Medical Society also gave away \$60,501.27 to 23 other charities, educational funds, youth organizations and civic institutions. This money represents all surplus income from the polio drive, which saw 76 per cent of the population of Tulsa County immunized against the disease. □

Board of Trustees Proceedings

Financial support for the Oklahoma Medical Political Action Committee, personnel requirements for the OSMA headquarters office, and maintenance of the OSMA building and property were agenda items receiving major attention from the association's Board of Trustees at a special meeting held on July 26th in Oklahoma City.

Trustees voted to join other corporate groups in contributing to the educational fund of the Oklahoma Medical Political Action Committee. A contribution of \$5,000 was authorized after Trustees were assured that the funds would not be used in political campaigns, but would be restricted to non-partisan political education purposes.

The educational funds will be used to help maintain the central office of OMPAC in Oklahoma City and to prepare and disseminate nonpartisan political education material.

Trustees also encouraged OMPAC to solicit voluntary contributions from individual members of the Oklahoma State Medical Association and approved lending association assistance during an intensified membership drive.

On recommendation of the House of Delegates (May, 1964), the Board of Trustees also examined the adequacy of the present full-time OSMA staff to meet the demands of an accelerated program of activities. Although state and national projects have greatly increased in number and complexity during the past few years, the size of the association staff has not changed in twenty years.

Therefore, the Trustees authorized the association's Executive Committee "to interview applicants and to use its discretion in hiring one or more employees to fulfill the requirements of the added work-load at the central office." There are presently six full-time employees.

Recognizing that the OSMA's \$100,000 office building has not received any major repairs or improvements since it was built in 1956, the Trustees authorized new parking lot paving and curbing, interior painting and plaster repair, and other items to restore the function and appearance of the building. In addition, new chairs will be purchased for the main conference room. Estimated total cost is \$7,000.

AMA Dues Increase Opposed

Advised that the AMA Board of Trustees is presently considering a proposal to increase national dues, the OSMA Board approved the following resolution:

RESOLUTION

"WHEREAS, America's health care system faces a grave test in the next decade due to trends in the social, economic and political development of our Nation; and

WHEREAS, to aid in meeting these challenges, a \$55 annual dues increase is being requested for the AMA, and such request will be considered at the 1964 Clinical Session of the AMA House of Delegates; and

WHEREAS, the AMA has just completed the implementation of a \$20 per year dues increase, and now has an annual budget of \$22½ millions; and

WHEREAS, the significant increase in question would lessen the financial capabilities and inhibit the future growth and effectiveness of state and county medical societies; and

WHEREAS, state and county societies have less earned-income potential than does a national organization and are primarily financed through membership dues; and

WHEREAS, the adverse effect of a national dues increase of the proposed amount would tend to centralize the voice of American medicine; and

WHEREAS, the principle of centralization has long been opposed by the American Medical Association, particularly in regard to Federal domination of state responsibilities; and

WHEREAS, the most effective rapport with the public can be achieved by accelerated public information activities at the state and local levels; and

WHEREAS, the AMA's activities are being commendably executed on the present budget, to the extent that many state and county societies are unable, financially or otherwise, to effectively implement all current AMA programs, much less to undertake additional activities;

NOW, THEREFORE, BE IT RESOLVED, that the AMA House of Delegates take positive action by bolstering the financial capabilities of organized medicine where it is needed most, at the state and county medical societies, and to accomplish this goal;

BE IT FURTHER RESOLVED, that the AMA should immediately call a conference with officers of state and county medical societies, at which time the short and long-range plans of organized medicine should be outlined in detail, and an appeal made for increasing the wherewithal of these constituent societies to better meet their obligations, including a raise in local dues if necessary."

The resolution will be presented to the AMA House of Delegates on November 29th in Miami Beach, Florida. It will also be circulated in advance to other state medical societies.

Welfare Policy Stated

E. M. Gullatt, M.D., Trustee and Chairman of the association's Public Welfare Committee, reported that a Joint Statement had been prepared by representatives of his committee and representatives of the Oklahoma Hospital Association. The statement, he said, was designed to cover certain recommended improvements in the health care program of the Department of Public Welfare and to recommend payment formulas in the event additional financing becomes available.

The Board of Trustees approved the joint statement, which contains hospital, medical and general recom-

mendations. The statement will be used in negotiations with the Department of Public Welfare.

Recommendations to Improve Hospitalization Program: The following recommendations are approved by the medical and hospital associations for the improvement of the hospital portion of the Department of Public Welfare's health care program:

1. A maximum of 40 days hospital care per year should be provided, with extensions up to an additional 20 days permissible "by report." The OSMA Public Welfare Committee will volunteer to rule on requests for extension, meeting every 30-60 days, or as recommended by the Department of Public Welfare.

Recipients should be furnished annually with a wallet-size record card on which the dates of admission and discharge should be recorded by the hospital(s).

Payment to hospitals should be at the "A" rate of pay as specified in a succeeding recommendation.

Adoption of this recommendation means that there will be no limit on the days per admission, only the annual limit will prevail.

2. Since the recipient must share the responsibility for careful use if the utilization problem is to be controlled, the incorporation of a deductible feature into the hospitalization portion of the program is recommended, using either of the following alternatives:

a. The recipient should be responsible for the first \$25.00 of hospital costs per admission, but ability to pay the deductible shall not be a condition of admission.

b. A daily deductible of \$2.50 may be billed directly to the recipient, for a period not to exceed 10 days per admission.

3. Hospitals will be reimbursed their current prime cost up to the established ceiling of the three categories of participating hospitals (teaching, accredited and non-accredited hospitals).

a. Current prime cost is defined as the audited per diem cost (less depreciation on building and equipment) for the previous year's ac-

counting period, allowing five per cent increase over the previous year's prime cost.

b. The ceilings for the three categories of hospitals are computed as the weighted average current prime cost on all of the participating hospitals in that category in the state.

Medical Program Improvements: When and if additional financing is obtained for the DPW health care program, the following changes are recommended in the method of compensation for medical services:

1. The rate of payment for surgical care should be 75 per cent of the current fee schedule being employed by the Office of Dependents Medical Care in Oklahoma.

2. For in-patient medical care, the rate of payment should be \$15.00 for the first day of hospitalization and \$5.00 per day for the next 12 days.

3. The present policy of not paying for medical care rendered to patients readmitted within a 90 day period is to be rescinded.

General Improvements: The medical and hospital associations are also recommending certain general improvements:

1. All health care vendors should continue their joint educational efforts to conserve welfare medical care funds through careful use.

2. Hospital administrators, Chairmen of Boards of Control, and Chiefs of Staff should be admonished by the appropriate vendor associations to honor the jurat requiring complete medical records to justify the diagnosis for admission. Under the auspices of the Department of Public Welfare, audits of records should be made by the medical and hospital associations, as indicated, with gross violators subjected to the possibility of making restitution of funds.

3. All hospitals will continue to be urged to establish utilization committees, within their organized medical staffs, to review welfare admissions periodically.

4. Under the authority of the Public Welfare Commission, and with the advice and assistance of the vendor associations, welfare recipients should be reminded annually of the

benefits to which they are entitled, the proper procedure for obtaining such benefits, and the necessity for careful use.

The notification should be made in the form of a brochure to be written as concisely and clearly as possible. Emphasis should be placed upon the necessary cooperative spirit between recipients, the welfare department, and vendors to insure maintenance of optimum benefits within the availability of funds.

5. The life-in-danger admission policy should be maintained, since any attempt at restrictions would undoubtedly impose hardships against deserving recipients.

6. The Department of Public Welfare presently has excellent statistical information on the program as it has operated throughout the years. However, the Professional Advisory Committee has been unable to make good use of this information for long-range planning purposes and for current utilization control, because the members of the advisory committee are not trained in statistical analysis, nor are they insurance experts.

Therefore, it is recommended that a competent consultant actuary firm be made available to the committee to assist in projecting utilization and cost factors, as well as to develop effective ways and means of controlling utilization.

Care for Military Dependents

Trustees deferred action on a request from the Office of Dependents' Medical Care to renew association sponsorship of the health care program for the families of service men. The question will be settled now by the OSMA House of Delegates at its next session.

In a letter from O.D.M.C. director, General H. W. Doan, the association was asked to once again join in a contractual arrangement with the Department of Defense to provide certain health care benefits for the dependents of military servicemen. General Doan cited the present difficulty of adjudicating fees on unusual cases and further suggested that the overall fee schedule could be

improved with the cooperation of a committee of the medical association.

The medical association withdrew from its previous contract with the Office of Dependents' Medical Care at a special meeting of the House of Delegates in September, 1958. The relationship, which had lasted since December, 1956, was terminated because the government agency unilaterally changed the concept of the program by forcing more dependents to use military hospitals and by materially adjusting the scope of private medical services to be offered.

Although the association terminated its formal relationship with O.D.M.C., the House of Delegates left it to the individual physician as to whether or not he wished to participate in the program. Since the time the decision was made in 1958, Blue Cross-Blue Shield has continued as fiscal administrator of the program in Oklahoma, but in such capacity it only processes routine claims. Disputed claims are referred to O.D.M.C. for settlement, and no adjustments have been made in the overall fee schedule.

Other Actions

The Board of Trustees also:

- Approved the Audit Report for fiscal year 1963-64. Copies of the audit have been mailed to all members of the House of Delegates.

- Appointed an Appropriations and Auditing Committee comprised of Bob J. Rutledge, M.D.; Lewis C. Taylor, M.D.; and Rex E. Kenyon, M.D., all of Oklahoma City.

- Authorized short-term investments of operating capital now held in a checking account. (All dues for the entire year are collected between January and April, which results in a surplus of association funds at the beginning of each organizational year).

- Approved the purchase of an advertisement in the inaugural issue (August 15th) of the "Oklahoma Journal," a new daily newspaper in Oklahoma City.

- Suggested the appointment of a liaison committee with the State Health Department to supervise the conduct of a year-round program on immunization education.

- Recommended that the State Board of Education provide for a 15-minute exercise period in the curriculum of public schools.

- Authorized the OSMA Council on Public Health to participate in the development and publication of a bibliography on the subject of cigarette smoking as a health hazard. To be prepared in cooperation with other professional groups, government departments, and voluntary health agencies, the bibliography of reference material will be used for health education purposes.

- Approved OSMA 50-Year Club membership for F. P. Robinson, M.D., Pond Creek.

- Voted to continue OSMA sponsorship of the Essay Contest of the Governor's Committee on Employment of the Handicapped.

28 Attend Meeting

Trustees attending the July 26th meeting were: Harlan Thomas, M.D., Tulsa; C. L. Tefertiller, M.D., Altus; C. M. Hodgson, M.D., Kingfisher; F. A. Davis, M.D., Shawnee; Wylie G. Chesnut, M.D., Miami; Bob J. Rutledge, M.D., Oklahoma City; Malcolm E. Phelps, M.D., El Reno; Thurman Shuller, M.D., McAlester; Worth M. Gross, M.D., Tulsa; Edward K. Norfleet, M.D., Bristow; Avery B. Wight, M.D., Enid; Vernon D. Cushing, M.D., Oklahoma City; L. B. Word, M.D., Bartlesville; J. B. Tolbert, M.D., Mountain View; Joe L. Duer, M.D., Woodward; R. R. Hannas, M.D., Sentinel; Burdge F. Green, Jr., M.D., Stilwell; C. B. Dawson, M.D., Oklahoma City; E. M. Gullatt, M.D., Ada; C. Riley Strong, M.D., El Reno; Wilkie D. Hoover, M.D., Tulsa; Francis R. First, M.D., Checotah; G. B. Gathers, M.D., Stillwater; Albert W. Brownlee, M.D., Guthrie; Samuel R. Turner, M.D., Tulsa; Lewis C. Taylor, M.D., Oklahoma City; E. M. Lusk, M.D., Tulsa; and Alpha L. Johnson, M.D., El Reno. □

Samuel Goodman Memorial Symposium To Be Held in Tulsa

St. John's Hospital of Tulsa announces the first annual Samuel Goodman Memorial Symposium to be held on September 18th and 19th in the hospital auditorium.

The Samuel Goodman Memorial Symposium has been made possible by a perpetual endowment fund established by friends and colleagues of the late Doctor Samuel Goodman. The endowment honors the memory and services of one of Tulsa's outstanding physicians. The annual symposium will perpetuate Doctor Goodman's great interest in continuing medical education by providing a forum for outstanding authorities to present personally the latest information on pertinent topics of interest to the practicing physician. There will be no registration fees.

The first symposium will be devoted to the subject of headache. Guest participants will be Doctor Arnold P. Friedman of New York City, Doctor Adrian M. Ostfeld of the University of Illinois and Doctors Louis Jolyon West and Stewart G. Wolf, Jr., of the University of Oklahoma.

Program Announced

The program on Friday evening, September 18th, at 7:30 p.m. will include "Classification and Mechanisms of Headache"—Doctor Ostfeld; "Diagnosis and Differential Diagnosis of Migraine and Muscle Contraction Headache"—Doctor Friedman; "Psychiatric Aspects of Headache"—Doctor West; "Headache Associated with Organic Diseases of the Nervous System"—Doctor Wolf.

Saturday morning's program which will begin at 9:30 a.m. on September 19th, will feature "General Principles of Therapy"—Doctor Ostfeld; "Treatment of Migraine with Emphasis on Newer Drugs"—Doctor Friedman; "The Psychiatric Management of the Headache Patient"—Doctor West and "Treatment of Structural Diseases Associated with Headache"—Doctor Wolf.

Interns and Residents Will Organize

This first Samuel Goodman Memorial Symposium will also mark the establishment of the St. John's Hospital Interns and Residents Alumni Association. Doctor Goodman's great interest in the training of young physicians throughout his long tenure on the staff of St. John's Hospital has provided the impetus for the creation of the Alumni Association.

Inquiries pertaining to the Alumni Association may be addressed to Doctor Paul Grosshart in care of St. John's Hospital, Tulsa, Oklahoma. □

Oklahoma Senators Visited

A delegation of physicians and others made a special trip to the nation's capitol for the purpose of reiterating opposition to a health care program financed through the social security system. Advised that efforts would be made in the U.S. Senate to amend a House-passed social security bill by adding a health care scheme to it, the Oklahoma State Medical Association reacted quickly to form a delegation.

The group left Oklahoma City and Tulsa by airplane on August 4th, and had an appointment with Senator Monroney on the following day. Senator Edmondson was in Oklahoma City, but was also contacted.

Oklahoma's senators were told that the state had no need for additional federal legislation to provide health care for the aged, since the state's Kerr-Mills plan already offered a comprehensive medical, hospital, nursing home and home care program for nearly fifty per cent of the entire over-65 population. Further, they were advised of the concern Oklahoma employers had for the ever-increasing social security tax-burden.

OSMA opposition to social security coverage of doctors was also stressed.

The delegation consisted of Harlan Thomas, M.D., Tulsa, OSMA presi-

Retiring Dean Honored



President Cross, left, Dean Everett and Doctor Starkey, right, with portrait alumni presented the School of Medicine. Portrait of Dean Everett was painted by Hungarian artist Lejos Markos.

Mark R. Everett, Ph.D., D.Sc., was lauded for his contribution to medical education at a banquet medical alumni gave in his honor preceding his July 1st retirement from the position of dean and director of the University of Oklahoma Medical Center.

"Doctor Everett's influence during the 40 years as professor of biochemistry and 17 years as dean . . . has touched the lives of hundreds of physicians," said Wayne A. Starkey, M.D., Altus, toastmaster for the

event June 4th in the Skirvin Hotel, Oklahoma City.

A highlight was the unveiling of a portrait of the dean which the Alumni Association of the School of Medicine commissioned as a gift to the school. It hangs in the Medical Center Library.

After a European vacation, Doctor Everett will return to the Medical Center in late summer as regents professor of the medical sciences and dean emeritus. □

dent; Rex E. Kenyon, M.D., Oklahoma City, Chairman of the association's Council on Public Policy; Malcolm E. Phelps, M.D., El Reno, Delegate to the AMA; E. M. Gullatt, M.D., Ada, Chairman of the OSMA Public Welfare Committee; C. M. Bielstein, M.D., Oklahoma City, Chairman of the Department of Public Welfare's Professional Advisory Committee; Maxwell A. Johnson, M.D., Tulsa, President-Elect of the Tulsa County Medical Society; Terrell Covington, Jr., M.D., Tulsa; Harold Belknap, Norman, Publisher of the Norman Transcript; O. B.

Campbell, Vinita, Editor of the Vinita Daily Journal; Ralph Bethel, Tulsa, vice-president of Oklahoma Blue Cross-Blue Shield; Don Oxford, D.D.S., Midwest City, Chairman of the Oklahoma State Dental Association's Legislative Committee; James Henry, Oklahoma City, Administrator of Baptist Memorial Hospital and member of the Oklahoma Hospital Association's Legislative Committee; Don Blair, Oklahoma City, Executive Secretary of the OSMA; and Jack Spears, Tulsa, Executive Secretary of the Tulsa County Medical Society. □

OSMA To Host Six-State Conference on Aging And Long-Term Care

Oklahoma City will play host to a six-state Regional Conference on Aging and Long-Term Care. The event to be held in Oklahoma City's Skirvin Tower Hotel, October 15th-16th, 1964, is sponsored by the American Medical Association in cooperation with the Oklahoma State Medical Association.

The purpose of the conference is to stimulate joint action at state and local levels between medicine and other groups with interest and knowledge in the fields of aging and chronic illness. Discussion will focus on two major areas:

1. Action to meet the needs of older people in such areas as employment, health maintenance, adult education, service to the community and preparation for later years.

2. New developments in facilities and programs for care of long-term patients of all ages, and ways of financing long-term care.

The six states involved in the regional meeting include Oklahoma, Arkansas, Missouri, Kansas, Texas and Louisiana. Representatives of health agencies and professions are being invited. Moreover, numerous other organizations are being encouraged to send representatives to the October event. They include such groups as agriculture, business, labor, churches, schools, women's organizations, service clubs, retired persons organizations, communications media, members of the state legislature and elected state, county and local officials.

The Chairman for the conference has been named. He is Frederick C. Swartz, M.D., of Lansing, Michigan, who serves as Chairman of the AMA's Committee on Aging. Doctor Swartz's Committee on Aging has drafted its tentative outline for the October program. And already, a number of notable speakers have accepted featured spots on the program.

The tentative outline of the Oc-

tober 15th-16th conference program is as follows:

Thursday, October 15th

9:15 a.m. WELCOME
9:27 a.m. AGING AND LONG-TERM CARE

9:40 a.m. A FORMULA FOR FULFILLMENT

(15-minute address on avenues to meaningful living for older people)

10:00 a.m. MEETING THE CHALLENGE

(Symposium: 15-minute presentations)

In Education

In Employment

In Community Service

10:50 a.m. FIVE-MINUTE BREAK

10:55 a.m. In Health Maintenance
In Preparation for Aging

11:30 a.m. FLOOR DISCUSSION

12:00 a.m. OPEN LUNCH

1:40 p.m. NEEDS OF THE LONG-TERM PATIENT

2:00 p.m. NEW DIRECTIONS IN HOME CENTERED CARE

(Symposium: 15-minute presentations)

A Coordinated Hospital-Nursing Home Care Program

Home Care: A Community Approach

Dental Care for the Long-Term Patient

New Applications in Home-maker Service

3:15 p.m. FIVE-MINUTE BREAK

3:20 p.m. IMPROVING NURSING HOME CARE

3:37 p.m. KERR - MILLS IN FINANCING OF LONG - TERM CARE

(Description of successful state OAA-MAA program)

3:54 p.m. AREA-WIDE PLANNING FOR LONG-TERM CARE

4:12 p.m. COMMUNITY ACTION IN LONG-TERM CARE

Friday, October 16th

9:10 a.m. REHABILITATION FOR LONG-TERM PATIENTS

9:27 a.m. HEALTH INSURANCE FINANCING OF LONG-TERM CARE

9:45 a.m. BLUEPRINT FOR COMMUNITY ACTION

10:15-12:15 CONCURRENT DISCUSSION GROUPS ON:

Adult Education and Preparation for Later Years

Employment and Community Service for Older People

Health Maintenance and Rehabilitation Programs

Home-Centered Care

Community and Area-Wide Planning

Others related to Areas of Conference

12:30 p.m. BANQUET

2:00 p.m. ADJOURNMENT OF CONFERENCE

2:15-5:30 Meeting of AMA Committee on Aging with Chairmen of State Medical Association Committees on Aging

Among the speakers who have confirmed their participation in the Conference are: AMA President Norman A. Welch, M.D. who will deliver the Banquet Address on Friday noon; Dean W. Roberts, M.D., Executive Director of the National Commission on Community Health Services, Bethesda, Maryland, who will give the talk on "Blueprint For Community Action" on Friday morning; A. B. Halverson, Vice-President, Occidental Life Insurance Company of California, (Los Angeles), will give the talk on "Health Insurance Financing Long-Term Care" on Friday morning; W. E. Beaumont, Jr., President of the American Nursing Home Association, Little Rock, Arkansas, who will talk on "Improving Nursing Home Care" on Thursday afternoon; Charles Donnelly, D.D.S., Dental Consultant to the U.S. Public Health Service in Washington, D.C., whose subject is "Dental Care For the Long-Term Patient," Thursday afternoon; and Charles C. Edwards, M.D., Assistant Director of the AMA's Division of Environmental Medicine and Medical Services, who will talk on "Area-Wide Planning for Long-Term Care," also on Thursday afternoon.

The Oklahoma State Medical Association's Council on Public Health is working cooperatively with the AMA by supplying up-to-date mailing lists and assisting in making physical arrangements for the two-day conference. The Council on Public Health's Chairman, Hayden

H. Donahue, M.D., says, "Inasmuch as the bulk of attendance to the Conference must naturally come from organizations in Oklahoma, I'm extremely hopeful that all Oklahoma physicians will make plans to attend the conference. Not as a gesture of courtesy to the AMA, but because of the need for physicians to share in the expanding advances of knowledge where care and treatment in the fields of aging and chronic illness are concerned." □

Crash Injury Program Selects New Study Area

On July 14th, 1963, the Board of Trustees of the Oklahoma State Medical Association endorsed an Automotive Crash Injury Research program sponsored by Cornell Aeronautical Laboratory, Inc. of Cornell University in cooperation with the Oklahoma State Highway Patrol, the Oklahoma State Department of Health, and the Oklahoma Hospital Association.

The research study, which officially began January 1st, 1964, is scheduled to last two and one-half years from the date of inception. Taking two Oklahoma Highway Patrol Districts in a given six-month period of time and concentrating the study on the counties confined within the districts, the first six-month area study was completed on June 30th.

The "second" six-month phase of the program in Oklahoma began July 1st, 1964, and concentrates on the following counties: Atoka, Bryan, Carter, Choctaw, Coal, Garvin, Johnston, Love, Marshall, McCurtain, Murray, Pontotoc, Pushmataha, Beaver, Cimarron, Ellis, Harper and Texas.

The purpose of the Automotive Crash Injury Research program is to obtain reliable data on the frequency, nature, and specific causes of injury to occupants of passenger cars and trucks involved in accidents. Medical data submitted by physicians treating accident victims is matched with information on injury causes and accident data supplied by state patrol officers and is submitted to Cor-

nell University, Buffalo, New York, for analysis and statistical tabulation.

The OSMA Council on Public Health, under whose jurisdiction the research activity is coordinated, has been informed that data already collected from other cooperating states has served to guide automobile manufacturers in making important design changes, first introduced in 1956 model passenger cars, specifically engineered to provide protection during accidents. Reliable information being obtained on the degree of protection offered by seat belts, improved door latches, energy-absorbing steering wheels, padding, etc. is most encouraging, the Council reports.

These studies, moreover, are producing medical statistics which promise to implement treatment of auto crash victims through more definitive knowledge of the nature and scope of the problem. The Trauma Committee of the American College of Surgeons has expressed great enthusiasm for this project.

According to Hayden H. Donohue, M.D., Chairman of the OSMA Council on Public Health, here's how the study is conducted where the physician is concerned. Whenever someone is injured or killed in an accident involving a passenger car or truck, the state patrolman investigating the accident will bring to the hospital, or private physician treating the victim, a special medical report form provided by Cornell inscribed with the patient's name. The attending physician will be requested to complete the form by recording specific information on the extent and nature of all injuries, no matter how minor.

"Prompt submission of medical reports will play an important part in the prevention of deaths or injuries resulting from auto accidents in the future," Doctor Donahue said. The chairman urges earnest participation in this effort aimed at solving one of the nation's foremost epidemiological problems.

The Executive Committee of the OSMA, as well as legal counsel of the association, after reviewing the entire project and related laws of Oklahoma, have endorsed physician-

DEATHS

JAMES L. PATTERSON, M.D.
1884-1964

James L. Patterson, M.D., 80, who retired June 1st after 58 years of active practice, died July 3rd in Duncan.

Born in Union Star, Missouri in 1884, Doctor Patterson graduated from Ensworth Medical College in St. Joseph, Missouri in 1906. During World War I, he served with the medical corps.

Doctor Patterson had received dual honors from the Oklahoma State Medical Association. Recognizing his loyalty to the profession, he was presented a Fifty-Year Pin in 1956 and an Honorary-Life Membership in 1962. □

LEO L. SMITH, M.D.
1893-1964

An Oklahoma City physician since 1929, Leo L. Smith, M.D., died July 11, 1964.

A native of St. Marys, Ohio, Doctor Smith graduated from the University of Maryland School of Medicine in Baltimore in 1917. Following residency training, he practiced in Sapulpa, Avant and Duncan, Oklahoma before coming to Oklahoma City.

During World War I, Doctor Smith served with the medical corps. □

SILAS G. HAMM, M.D.
1877-1964

Silas G. Hamm, M.D., who began his medical practice in Haskell, Oklahoma and retired there in 1959, died in Muskogee on July 4th, 1964.

The 87-year-old physician was born in Yellville, Arkansas and graduated from Memphis Hospital Medical College in 1912.

Recognizing his years of service which had been conducted with dignity and honor to the profession, the Oklahoma State Medical Association had presented Doctor Hamm with an Honorary-Life Membership and a Fifty-Year-Pin in 1963. □

participation in the research study from a professional liability standpoint. □

Miscellaneous Advertisements

BIG SAVINGS on "Returned-To-New" and surplus equipment. Reconditioned, refinished, guaranteed, X-Ray, examining tables, autoclaves, ultrasonics, diathermies, or tables, or lights, and more. Largest stock in the Southwest. **WANTED:** Used Equipment. TeX-RAY Co., 3305 Bryan, Dallas. (Open to the profession Wednesdays, Thursdays, 9-5. Other hours by arrangement.)

FOR RENT: Three-room air-conditioned suite in clinic with two general practitioners and a prescription shop. Mrs. L. C. Northrup, 1828 East 32nd Place, Tulsa, Oklahoma.

PHYSICIAN needed for Locum Tenens, Tulsa, August 8th-23rd. Pediatrician or general practitioner will fill the bill. Write Key H, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

GENERAL practice established ten years; grosses over \$70,000.00 per year. Building leased, complete office, laboratory and x-ray equipment. Liberal terms. Leaving to specialize, will stay to introduce until December. Contact Key T, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

OPENING for board certified or eligible surgeon, and ophthalmologist in well-established medical clinic. Salary open, plus profit-sharing income. Contact Hansford Counts, 163 Herring, Elk City, Oklahoma, CA-5-1139.

FOR SALE: X-Ray Patrician 200 MA with all accessories except motor drive. Attractive, well cared for, and efficient machine, two years old. Discount of 50 per cent off 1961 price. \$1,000 down, will finance balance, including installation, if desired. Contact Key A, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

WESTOAKS PROFESSIONAL CENTER

In the new Westoaks Village Shopping Center—N.W. 10th and Rockwell Ave.

Attractive office space completed to your specifications in Oklahoma City's most successful new center. Space available from 400 to 1500 square feet. R. M. Webber, JA 5-0443.

LOCUM TENENS. Physician awaiting entrance into the Navy desires locum tenens employment from August 15th to September 1st. Contact Dan E. Chesnut, M.D., 225 North 3rd, Okemah, Telephone MA 3-0867.

EXCELLENT opportunity for one or two general practitioners to buy or lease complete new office and equipment, including x-ray. Clinic located in Barnsdall, Oklahoma, with established practice of five years with far above average gross and net. Collection of 95 per cent of accounts. One other M.D. established here, age about 75, without facilities. Also, lovely two-story home just renovated for extreme comfort and beauty. Contact Ed A. Brashear, M.D., 511 West Main, Barnsdall, Oklahoma.

FOR RENT or lease, 4609 North Classen Blvd., Oklahoma City, 2,417 square feet, ultra modern, ultra spacious physician's office, including large reception room, secretarial office, two private offices, three examining rooms, laboratory, x-ray and dark room and fallout shelter; generous parking (approximately 5,000 square feet), ample air conditioning and heating. Call Mrs. Paul WI 2-7760 or Clyde H. Hale, Jr., CE 2-7128.

GRADUATE of the University of Nebraska School of Medicine, now completing third-year residency in dermatology, wishes location in Oklahoma. Contact Orval P. Nesselbush, M.D., 3053 South 83rd Street, Milwaukee, Wisconsin.

GENERAL surgeon to take over long-established practice in Oklahoma town of 10,000 people. Laboratory and office equipment for sale or lease. Contact Key R, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

IDEAL opening for young doctor in well established medical clinic, sharing reception room and equipment with three other doctors. Wonderful location on North May Avenue, Oklahoma City. Contact Frank D. Thompson, 3115 N. Pennsylvania, Oklahoma City, JA 5-5700 or JA 4-9552.

The theme for 1964-65 is "Preserving Our Medical Legacy," and Tulsa county has set the pace. A 71-page booklet including a growth graph has been compiled by the historian, Mrs. Robert E. Dillman.

From its 1931 organization of fifty-four members the Tulsa group had grown to 151 by the end of the war. During the years 1947-50 the Philanthropic committee became more active. An incubator was purchased for the Salvation Army home obstetric department and the needs of all the children in the charity wards of Hillcrest and St. Johns were aided with personal calls and gifts. As a group, the Tulsa Auxiliary was instrumental in getting the City Commissioners to pass a rabies inoculation ordinance in 1948. Another project voted that year was an annual donation to the Hillcrest Polio Building Fund for a glassed-in warm pool for the polio patients.

Tulsa sponsored an informative tea at Philbrook Museum, on April 16, 1949, in the interest of the Oklahoma Medical Research Foundation. Work in public relations was accomplished by stuffing envelopes for the T.B. Seal Drive and assisting the P.T.A. in the chest screening of all students at Central High School. Cancer kits were distributed to the Public Library, Tulsa University, the High Schools, and to members of the auxiliary. Members worked in the Red Cross Drive for membership and in their blood-bank program.

The Tulsa County Auxiliary continued its drive for "Hygeia" subscriptions and placed free copies in the public schools.

Nurse recruitment became a project of the Auxiliary and each year assistance has been given to the organization of the "Girls In White." In 1949 a nursing scholarship fund was set up at St. Johns Hospital.

By 1950 the Auxiliary had grown to 176 active members and the meeting places had to be moved from homes to clubs. The programs continued to be educational. Added to its other philanthropic projects, was the work of stuffing 45,000 envelopes for the Heart Association.

An outstanding feature of the year 1957 was the correlation of all committee work. A series of visits to nearby towns and counties to call upon all local doctors' families. At the same time the courtesy committee

called upon new Tulsa doctors' families and honorary members. The result of this excellent teamwork was noteworthy. The active membership grew to 204.

The Nurse Recruitment and Nurse Loan Fund Committee began sponsoring teas each year for high school seniors interested in nursing. "Hygeia" magazine was changed to "Today's Health" and the Tulsa Auxiliary placed copies in all the public school libraries, and more than one hundred subscriptions were sold to members.

In 1953 the need for nurses became more urgent, so the Medical Auxiliary helped organize "Future Nurses of America Clubs" in the Tulsa High Schools. Also contributions were made to the State Nurses Loan Fund.

As the years went along the Tulsa Auxiliary expanded its educational and philanthropic activities. A study club was formed in 1954 to study the Constitution of the United States and the Washington Newsletters were reviewed. The Public Policy Committee participated in all fund drives of Health and Civic Organizations in Tulsa. Members also worked in the County Medical Society booth at the State Fair.

When the need to be prepared for civilian defense of our country became apparent, the Tulsa group formed a Civil Defense Committee which attended training courses during the year. The committee has continued to work with the P.T.A. in maintaining a first aid station in the larger high schools.

In 1957 Tulsa took up the cause of A.M.E.F. by contributing the proceeds of a book review tea. The auxiliary devoted more and more time to serving the health and welfare needs of Tulsa. As the need arose, new committees were formed and the organization grew to 319 members. It is interesting to note that out of the total membership, 130 members are serving as officers, chairmen, committee members, or meeting hostesses. Seven members have served as president of the State organization. □

A five-year extension in the Hill-Burton hospital construction program is expected to receive both House and Senate approval before Congress adjourns for the Democratic Convention. The pending legislation calls for \$1.3 billion in grants over a five year period for building and modernizing hospitals, health centers, nursing homes, diagnostic centers and rehabilitation institutions. The original Hill-Burton program expired June 30th.

Some \$160 million is provided for modernizing existing structures, and an additional \$530 million may be converted to such use at the option of participating states.

Hospital labor costs have increased 545 per cent since World War II, according to a recent annual survey by the American Hospital Association. As a result of increased wage costs, the daily per patient cost has risen from \$9.39 in 1946 to \$38.91 in 1963, an increase of 314 per cent. The report says higher labor expense has resulted from the need for skilled help brought about by advanced medical technology, the efforts of hospitals to bring their wage scales and hours on a par with business and industry, and a higher employee to patient ratio. Where 241 employees were needed last year to care for every 100 patients, the ratio was only 148 to 100 in 1946.

Fourteen Senators boost Krebiozen. The Department of Health, Education and Welfare has been asked by a group of U.S. Senators to permit interstate shipment of the controversial cancer drug, Krebiozen. HEW banned shipment of the preparation last year as a result of its opinion that Krebiozen was ineffective and because the manufacturers did not comply with regulations governing investigational drugs.

The Association of American Medical Colleges predicts a tremendous shortage in medical school output by 1971 unless existing schools increase capacity or new schools are built. In the fall of 1963, 8,754 first year students were enrolled, but it is estimated

that 11,700 first year students will be needed in 1971 to meet the demand of an expanding population. Commitments have been made to establish twelve new schools with an aggregate first year capacity of 800 students, still 2,200 places short of the optimum objective. New two-year schools are planned for the University of New Mexico, Rutgers University, Michigan State University, University of Hawaii and Brown University. Four-year courses are planned for the University of Arizona, University of California (at San Diego), University of Connecticut, Pennsylvania State University, University of Massachusetts, Mount Sinai Hospital, New York, and the University of Texas (at San Antonio).

Have a knotty referral problem? Physicians with patients needing specialized services or equipment, home or institutional care, or who have financial problems in meeting the costs of illness, may find relief by contacting the State Health Department's new State Information and Referral Service (SIRS). The service maintains a central index of health and welfare resources and services, both public and private.

Be on the lookout for Corine Fern Buckner (alias Diane Twitchell, and many others). She's wanted by the FBI. Frequently posing as a nurse, physician or physician's wife, she opens checking accounts at banks with a cash deposit, then later deposits fictitious checks in large amounts. Substantial withdrawals are made prior to the return of the fraudulent deposits.

MEETINGS

October 13-18 American Association of Medical Assistants, Sheraton-Oklahoma, Oklahoma City

October 15-16 AMA Conference on Aging and Long Term Care, Skirvin Hotel, Oklahoma City

October 26, 27 and 28 Oklahoma City Clinical Society. Sheraton - Oklahoma, Oklahoma City

November 13-14 American Cancer Society, Oklahoma Division, Inc., Skirvin Hotel, Oklahoma City

November 29-December 2 American Medical Association, Miami Beach, Florida

SHOULD A MAN do without television to pay for medical care? Should he give up weekends at the lake to pay for hospitalization? Should he forego new clothes to buy medicines? A decision on how to answer such questions is not easy for many people.

Adequate food, clothing, shelter, education and medical care are considered essentials of life in the United States. Somewhere beyond these basic necessities there are luxuries but no one agrees on just where they begin.

Remember the story about the ant and the grasshopper? The ant worked all summer while the grasshopper lived it up. When winter came the grasshopper starved in the snow but the ant lived comfortably in his home built and stocked during the warm, sunny days.

According to the same pattern, one may be bankrupted by a simple appendectomy through loss of work, lack of savings or the mountain of other bills accumulated before his illness began. Another man with the same income may weather a long, complicated illness because he has lived within his means and planned for a few bad days along the way.

All men are not created equal either in brains or the capacity for work, in ambition or perseverance, so it is clearly impossible to make laws that will produce genuine equality among them. It follows then, especially in a free society, that family incomes and accomplishments range from very little to very much. Both extremes of the economic scale have no trouble securing adequate medical care in the United States but among those with average incomes the ability to pay for medical care often depends on a person's sense of obligation to his fellows as well as his industry, foresight or even pride.

Medical poverty has an indistinct, uncertain boundary. Between frank indigence and obvious solvency there is a broad, gray territory composed of people whose motivation to make their own way or to be supported is determined largely by individual necessity, their particular sense of responsibility and the example set by others. At the edge of this hazy area there are always opportu-

nists who can smell a hand-out miles away. These folks scream for help as soon as they see it given to their neighbors whose plight is little worse than their own. Near these vociferous free-loaders there are others who are only a little more timid, and then others, and others and others. Why work after the twenty-year fires have burned down? Large sections of many communities set an enticing, treacherous example of the good life without work or taxes sponsored by the pork barrel philosophy of certain elected public officials.

Compensated irresponsibility is as contagious as measles and it spreads like cancer. An innate dislike for work lurks constantly beneath the surface of every man's consciousness. By the mere failure to repress this laziness a man may stop working occasionally but if his shiftlessness is actually encouraged by a steady supply of life's necessities he may become a hopeless parasite. The "No Work, No Food" law of Nature was known to prehistoric men and it has been proved repeatedly by countless tribes and nations. It cannot be repealed by modern legislative action.

If the present private, State and National facilities for indigent medical care are inadequate, how much more is needed? Who is wise enough to define the boundaries without taking into account each individual's concept of personal responsibility?

If one group requires "free" medical care, why should not an adjacent group be given food? If food for these people is justified, why isn't the next group entitled to housing, or transportation or clothing?

Initiative and self-reliance can be encouraged among a nation's citizens but men cannot pass laws to insure its presence nor can they formulate a set of rules which will separate a nation into two groups, the supporters and the dependents, the workers and the drones. The extremes are relatively stationary but where dependence and independence merge the tide will run with our national conscience.

Every able bodied American should work to the best of his ability sustained by the understanding that he is an integral part of this nation whose strength is the sum of every individual effort. A dwindling group of working people cannot sustain an idle majority very long.

A United States President once said, "Ask not what your country can do for you, rather ask what you can do for your country." Or to paraphrase another American, "Responsible we can stand united, dependent we may fall apart."

Ogden Nash, thirty years ago, put it this way:

"The less you earn,
The more you're given;
The less you lead,
The more you're driven."

C. B. Dawson, M.D. □

Medical Evidence For the Disability Decision

OKLAHOMA PHYSICIANS each year furnish about 16,000 medical reports on behalf of 8,000 patients who apply for social security disability benefits. About half of those who apply are found "disabled" and join the 12,000 Oklahoma workers who, with their dependents, are currently receiving over \$17,000,000 a year in benefit payments.

The reports which physicians submit are crucial in deciding whether or not patients can receive these benefits. Unfortunately, a great many of these reports do not give enough clinical findings to permit a determination as to whether the patient is disabled within the meaning of the law. That is why second contacts are often made to obtain complete reporting of clinical data. What is needed is a report containing a complete history, physical examination and supporting laboratory data. Where inconsistencies which cannot be reconciled appear in the record, or where highly technical information is needed, such as a patient's capacity to consume oxygen at a specified rate, evidence may be obtained from an independent source.

To qualify for disability benefits, the patient must have a medically determinable physical or mental impairment which pre-

vents him from doing any substantial work. The impairment must have lasted six months, and must be expected to continue for a long and indefinite time, despite therapy.

The social security disability program is not operated entirely by the Federal Government. The Federal Government has contracts with State Government agencies to make disability determinations. For residents of Oklahoma, the disability decision is made by a unit of the Department of Public Welfare in Oklahoma City. In the State agency, the disability decision is made by a two-man team: A physician, and a layman trained in evaluating the vocational aspects of disability. The team decides whether the evidence shows the applicant is sufficiently disabled to prevent him from engaging in substantial work within the foreseeable future.

WHAT EVIDENCE IS NEEDED

Since the evaluating physician in the State agency does not examine the claimant personally, he must depend solely on the written record provided by his colleagues to reach a determination. Thus, the quality of his decision rests to a large degree on the quality of their reports.

The attending physician's clinical findings are of paramount importance. All of the applicant's impairments should be carefully described, the symptoms produced carefully elicited and reported, and supporting laboratory data given in detail. The examining doctor's diagnostic, prognostic and functional opinions are needed together with all the clinical and laboratory findings upon which such opinions are based. The facts must be in the record which stands as a document supporting a Government decision on a citizen's rights.

A symptom such as dyspnea aptly illustrates the kinds of questions that come to the mind of the physician evaluating ability to work in a patient. When was it first noticed? Is it persistent or intermittent? Is it progressive? How does it relate to exercise and other activities? What type of treatment was provided? Has it responded to treatment? If the reporting doctor wishes, he may furnish this information in a narrative statement using his own stationery instead of the medical report form.

Frequently evidence not supplied on initial report is available in the treating physician's records and, through a second contact, is obtained from him. This, however, takes up the physician's time, and, of course, delays the decision on the patient's case. The treating physician who understands what is needed can supply the necessary information on his initial report, save his own time and speed the decision on his patient's claim—*C. W. Robinson, M.D., Supervisor, Disability Determinations Unit, and N. Price Ely, M.D., Assistant Supervisor, Disability Determination Unit.* □

Mutual Aid

THE FREE FOR ALL Club, an entirely imaginary charitable organization, began its annual fund raising drive last week with a formal dinner dance in the Plush Room at the Wiltbrier Hotel. The gala affair was attended by nearly everybody who is anybody (with money) and the guest of honor was the richest man in town who got the party off to a good start with a very generous, tax-deductible contribution.

The brilliant event was built around the inspirational theme of "Come As You Are" so the women wore as many expensive things as their frames could carry while all the men stuffed their tuxedo pockets with certified analyses of their net worth and successful business ventures. The evening was highlighted by an elegant dinner featuring caviar and pheasant under glass served by candlelight to the music of gypsy violins. An orchestra imported from Australia kept the dancers swaying until dawn.

After consulting an accountant, the finance committee proudly reported that contributions had exceeded expenditures. The charity ball was a complete success.

The Free For All Club was founded many years ago by a travelling team of professional fund raisers who understood the exaggerated charm of avarice and affluence when group self-indulgence can be practiced in the name of charity. All money collected by Free For All is given to needy families after paying the usual operating expenses including stationery, postage, office rent, advertising, secretarial help and other miscellaneous items that are essential for successful

projects. Last year a grand total of \$43.25 was raised by the group, and as required by their constitution, the entire amount was changed into nickels which volunteers dropped into sidewalk kettles before Christmas. There is a movement afoot this year to amend the constitution so dimes can be used to compensate for the decreased purchasing power of money but in spite of the time saving aspect of this idea most members still prefer nickels because they are larger and make more noise. An emergency breakfast meeting has been scheduled aboard a yacht in the Caribbean before bringing the matter to a vote.

It has been suggested that the emphasis on luxury for members of some charitable organizations arises from a need for reassurance to the members' unconscious minds that they themselves are not poor. According to this view the anxious donors profit by a transient feeling of security while the indifferent objects of their charity receive another kind of benefit.

Perhaps The Club is not entirely useless after all.—*C. B. Dawson, M.D.* □

About Medicare

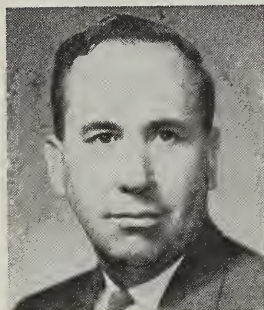
BY THE TIME this issue of the *Journal* is received and read, the Medicare proposal will have been acted on by the U.S. Congress.

At this writing, medical associations and other groups and individuals are desperately trying to withstand the mounting pressure of the national administration for immediate passage of a watered-down version of the social security health care bill.

Win or lose, the response against this politically-inspired measure has been most gratifying. Oklahoma newspaper editors, businessmen, allied professional people, and others have voluntarily joined with the medical profession in trying to protect the nation from another backward step and more monetary waste.

For five years we have struggled. We have told our story and the vast majority of people have agreed. It is clear that few persons actually want Medicare, but these few hold high positions in government or have great influence upon members of Congress.

Representative government is on trial. May the majority win! □



Now is the time for the profession to take a *good* look at a new *necessity* that is creeping in on us—Areawide Planning Councils for Medical Service. Certain groups are rapidly forming these councils, and this demands our study of the origin of the idea, the need for such councils, the benefit to be derived and, last but not least, the future role that this activity may play in the practice of medicine.

Areawide planning is not a new idea brought on by some sudden discovery of need. Five years ago, in 1959, four regional meetings were held over the United States under the auspices of the American Hospital Association and the U.S. Public Health Service. The product of these conferences was a booklet entitled, "Principles of Planning the Future Hospital System." This study is recommended as good reading, even for those who may feel it is beyond their areas of interest. The A.H.A. - U.S. P.H.S. plan is now being followed to the letter.

We are constantly bombarded with the information that there are great numbers of empty beds in some areas. These figures are quoted as absolute proof of the lack of need of new construction. However, one thousand beds that are not available to the public without first changing doctors or choosing a different hospital are not, in my opinion, surplus beds.

The planners must realize that bed count is only a small part of the problem of medical and hospital care. Statistics based on the "patient to bed" ratio theory are very misleading and often serve only the purposes of those being protected or benefitted. There are discrepancies between the figures released by the special interest groups and the

local Chambers of Commerce. Are motives served by statistics?

Other factors affect the problem, such as the number of available doctors, the number of beds available to all the public, the types of doctors in the area, the beds available to all the area doctors, etc.

We hear much about the cost of empty beds, but little is said about why they are empty. Should we force a patient to occupy a bed that he doesn't choose just because it may cost a little more? I don't believe that even members of the planning councils would like for this philosophy to be imposed upon them personally.

Does it enhance economy to stifle competition? Not in my opinion. Some suggest that "service contracts" might have more unfavorable influence on costs than has been brought to light.

How does all of this concern us, as medical doctors? Well, we are told that we are responsible for all medical services given to the public. Discussions of medical costs usually include our fees, hospital costs, drug costs, and the costs of many other services. But *medical costs* are discussed in one manner, and *medical services* in another. When it comes to medical services, the results are usually more important to the patient than the cost.

So, since the profession has responsibility for all medical services, it appears that we should logically have a major voice in the formulation and operation of any group trying to regulate the future manner of providing the services. Or, perhaps non-medical groups would like to assume full responsibility to satisfy the demands of the public for medical services.

The recent action in Tulsa indicates that the latter approach may be true. A new planning council has been formed with only one representative of the medical society

(Continued on Page 437)

Residual Carcinoma in Situ

PHILIP J. MAGUIRE, M.D.

*Is cold-knife conization
adequate therapy for
carcinoma-in-situ of the cervix?*

CARCINOMA IN SITU of the cervix is being diagnosed with increasing frequency. This is due primarily to the widespread use of cervical cytological study in the routine physical examination of women.

It has been well documented that a significant proportion of the untreated cases of cervical carcinoma in situ will progress to invasive cancer. Numerous studies have shown that this process usually requires from ten to thirteen years which agrees with the fact that most invasive cancers of the cervix are found in an age range approximately ten years older than that of carcinoma in situ. Since carcinoma in situ occurs in a younger age group the problem of conservation of the uterus for childbearing may become a consideration in treatment.

The cervical cell types may range from normal to slightly anaplastic, to clearly anaplastic, to carcinoma in situ and to invasive cancer. A positive cervical cytology indicates the need for further diagnostic study. Less than ten per cent of those women with positive cytological smears fail to show carcinoma in situ on biopsy and one-half of this number may develop an obvious lesion later.²

After a positive cervical cytology is found, further study is necessary to confirm the diagnosis. For example, other conditions

which produce abnormal cytology are chronic cervicitis, atypical squamous metaplasia and mycotic or fungal vaginitis. The diagnosis of carcinoma in situ may be proved by biopsy of suspicious visible areas or those areas which fail to stain with iodine. It is even better to do a cold-knife conization because it is possible for invasive cancer to be adjacent to carcinoma in situ.

A properly executed conization removes the squamo-columnar junction, much of the endocervical canal and a sizable part of the portio vaginalis. Since these are the areas where carcinoma in situ is most likely to occur it would seem that adequate cervical conization should be a therapeutic as well as a diagnostic procedure.

The purpose of this study is to determine the frequency with which residual carcinoma in situ was found following cold-knife conization of the cervix.

MATERIAL FOR STUDY

The records at St. Anthony Hospital in Oklahoma City from January, 1956, to December, 1962, inclusive, contain 157 cases of carcinoma in situ and 307 cases of invasive cancer of the cervix (table 1). Of these 157 cases of carcinoma in situ, 133 were treated by cold-knife conization followed by hysterectomy. It is significant that

Philip J. Maguire, M.D., a 1960 graduate of the University of Oklahoma School of Medicine, limits his practice to his specialty, Obstetrics and Gynecology. He is a member of the American Society for Study of Fertility and a Junior Fellow of the American College of Obstetrics and Gynecology.

From the Department of Obstetrics and Gynecology, St. Anthony Hospital, Oklahoma City, Oklahoma.

Table 1. Cervical Carcinoma 1956-1962

Year	STAGE					Unclass- ified	Total Invasive
	0	I	II	III	IV		
1956	5	5	12	2	11	5	35
1957	10	12	8	7	14	6	47
1958	25	12	13	5	24	9	63
1959	18	12	14	6	12	10	54
1960	30	11	13	6	8	2	40
1961	47	7	7	7	6	2	29
1962	22	10	14	7	6	2	39
	157	69	81	40	71	36	307

during the period of this study there was a steady increase in the number of cases of carcinoma in situ found annually while the number of cases of invasive cancer remained relatively constant.

The methods leading to a diagnosis of carcinoma in situ are listed in table 2. Those listed under "Biopsy" had no record of cervical cytological study while those listed under "Cytology" had positive cytological studies and later were biopsied or had conization. We should emphasize the high percentage of Class III cytologies which later were shown to be carcinoma in situ.

A breakdown of this series of 157 women by age groups indicates the preponderance of younger patients: 43 per cent were between the ages of 31 and 40 while 15 per cent were between the ages of 20 and 30.

DISCUSSION

Forty-three per cent of the women who had cold-knife conization of the cervix were found to have residual carcinoma in situ on histologic examination of the surgical specimen following hysterectomy (table 3). In this series the incidence of residual carcinoma in situ was approximately the same whether by the abdominal or vaginal surgical approach.

It is well established that carcinoma in situ may be a multicentric lesion; however,

Table 2. Primary Method Leading to Diagnosis

Incidental Following Hysterectomy	13
Conization for other Reasons	5
"Suspicious"	15
Biopsy	19
Cytology	
	Class II 0
	III 52
	IV 50
	V 3

Table 3. Residual Carcinoma in situ

	Vaginal Hysterectomy		Abdominal Hysterectomy		Total %
	No.	Percent- age	No.	Percent- age	
Residual	16	12	41	30.8	43%
No Residual	22	16	54	40.0	57%

an incidence of 43 per cent of residual carcinoma in situ in this series is ten to 20 per cent higher than most reported series.⁴ Moore, *et al.*³ found residual carcinoma in situ in only three of 46 cases where apparent microscopic clearance of the lesion was shown, yet their overall rate for residual carcinoma was 30 per cent. These data suggest that we should re-evaluate our methods of cervical conization.

Our series indicates that cervical conization is not adequate treatment for carcinoma in situ. In fact, 43 per cent of this series had residual carcinoma. Three women in whom conization showed only carcinoma in situ were found to have invasive cancer after hysterectomy.

Follow-up study of women in whom cervical conization is considered the definitive treatment for carcinoma in situ of the cervix requires very close doctor-patient co-operation and even this is hazardous since a significant number of these women eventually will develop recurrent carcinoma in situ or invasive carcinoma of the cervix. In younger women who are anxious to bear children, this price may not be unreasonable.

In general, hysterectomy with removal of a wide vaginal cuff should remain the treatment of choice for carcinoma in situ of the cervix.

SUMMARY

A study of 133 cases of cold-knife conization of the cervix with a diagnosis of carcinoma in situ is presented. This study revealed that 43 per cent of these patients had residual lesions in the uterus or vaginal cuff following hysterectomy. □

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1100 N. Dewey, Oklahoma City, Oklahoma

The Mechanism of Endotoxin Shock

LERNER B. HINSHAW, Ph.D.
CHARLES M. BRAKE, M.D.

The following mechanistic review of endotoxin shock suggests a more logical employment of time-proven methods in combatting the shock state.

THIS LABORATORY has been concerned with the adverse biological effects of lethal injections of endotoxin. A large number of hemodynamic parameters has been measured and evaluated during the post-endotoxin course in the dog and primate.^{23-31, 41, 42, 52} Ebert and Abernathy¹¹ have pointed out the increasing importance of endotoxin shock in clinical medicine. Circulatory failure, or shock, characterized by hypotension and diminished blood flow, may occur with almost every specific infectious process. A great variety of clinical settings seem to be more often accompanied by shock. Successful therapy of any condition would be immensely supported by an understanding of the basic reactions to insult. The underlying purpose of the following mechanistic review of endotoxin shock is to suggest a more logical employment of time-proven methods in combatting the shock state. It will be pointed out that the mechanism of endotoxin shock appears to be exceedingly complex and much diversity of view exists concern-

ing the basic underlying factors. This review will explore the significance of these differences and will suggest possible pathways for the action of endotoxin, resulting in irreversible shock.

I. *Elemental requirements for the initial response to endotoxin.* Previous studies in this laboratory have focused attention on the action of endotoxin on organ systems in the dog.^{23, 24, 26, 27, 29-31, 41, 57} Experiments have been carried out in which isolated perfused lungs and legs were studied in terms of the vascular effects of endotoxin. Figure 1 illustrates the results from these studies. It was found that when the isolated dog lung was perfused with gelatin or dextran rather than blood, no vascular response to endotoxin was observed.²⁴ A temporary constrictor response occurred in some instances when plasma, free of formed elements was used as the perfusate. Experiments were then carried out on the pump-oxygenator and pump-lung perfused dog leg. In this preparation it was found that only a small transient vascular response occurred following endotoxin injection: small vein pressure and leg weight increased slightly.³⁰ Subsequently it was observed that when a dog was included in the

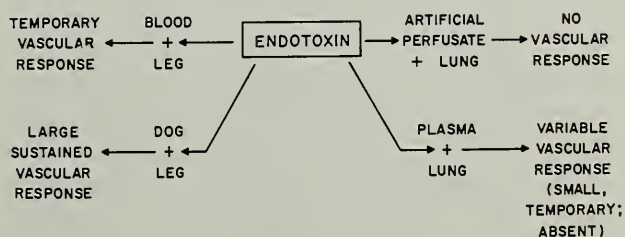


Figure 1. Intermediary reactions in the vascular response to endotoxin.

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perfusion circuit with an isolated leg of a second animal, intravenous injection of endotoxin resulted in marked sustained vascular responses in the leg. The responses, involving both pre-capillary and post-capillary vascular segments, persisted during the entire post-endotoxin period.³⁰ The characteristics of the responses were both histamine and adrenergic-like.

These previous studies with endotoxin suggest that certain blood constituents together with some specified region, organ, or mass of tissue are required to elicit and sustain vascular responses of large magnitude. The responses appear to have an important role in the development of irreversible shock because of their persistent nature, perverse influence on peripheral vascular hemodynamics and similarities to known vascular actions of endogenously released vasoactive agents. The following analysis has been carried out to ascertain possible roles of vasoactive agents in the development of irreversible endotoxin shock.

II. *Role of vasoactive agents in the early response to endotoxin.* Intravenous lethal injections of endotoxin in the dog result in an early release of histamine-like and catecholamine-like agents which have marked effects on the peripheral vasculature.^{23, 31, 41, 42, 57} The initial vascular responses may be considered from the standpoint of their first appearance after endotoxin: The injection of endotoxin itself produces only negligible viscosity effects within the first several seconds.

Initial renal vasoconstriction in the isolated perfused kidney may be observed within five seconds following intra-arterial injection of endotoxin.²⁶ Vasoconstriction of the intact kidney has been reported within 15-35 seconds after an intravenous lethal injection of endotoxin in the dog²³ and may occur in the absence of systemic hypotension. The pulmonary vascular response usually develops more slowly after an initial delay of up to 90 seconds,^{24, 41} suggesting the occurrence of intermediate reactions in blood or lung tissue. Vascular responses of a dog-pump perfused foreleg are of interest inasmuch as a regular sequence of events is ordinarily observed: An initial decrease in leg

resistance may occur coincident with increases in venous segment resistance and leg weight^{30, 46} and a marked fall in systemic arterial pressure of the dog. This initial response is largely histamine-like in character and is considered responsible for the marked decrease in systemic arterial pressure,⁴⁵ due to hepatic,^{45, 48, 60} and splanchnic^{31, 47} venous constrictions and a subsequent decrease in venous return.^{28, 60} The apparent difference in the early response of the kidney²³ and foreleg³⁰ may be due to a direct action of endotoxin on the kidney.²⁹

Systemic hypotension appears to be the primary stimulus for release of catecholamine-like agents, elaborated into the blood within ten minutes after endotoxin in the dog.^{30, 52} The release of these agents is indicated by marked increases in segmental resistances in the isolated denervated foreleg receiving a continuous flow of blood from a shocked animal.³⁰ The greatly depressed systemic arterial pressure shows a gradual partial recovery within fifteen minutes after endotoxin.^{28, 45, 60} The recovery is primarily due to the partial restoration of venous return²⁸ and release of catecholamine-like agents.^{30, 32, 47}

This preliminary sequence of events brings to a close the initial vascular response to endotoxin in the dog. The role of histamine during this phase of shock has been derived from two main avenues of research in the dog and primate. Histamine is rapidly released after endotoxin in both the dog^{33, 34}

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and monkey,²⁷ and provides the primary essential stimulus for catecholamine release^{30, 52} by virtue of its role in the development of systemic hypotension.^{21, 32} The administration of a histamine releasing agent (48/80) prior to the injection of endotoxin greatly alters the usual vascular response to endotoxin: Only a gradual fall in systemic arterial pressure is observed because of a decreased rate of hepato-splanchnic pooling.³² If 48/80 is given after endotoxin, the characteristic responses to 48/80 are also modified.³² These observations suggest a common underlying mechanism for the vascular actions of 48/80 and endotoxin on the hepato-splanchnic circulation.

The pulmonary vascular response to endotoxin is reproduced by histamine injection,^{14, 41, 42} particularly in regard to changes in venous segment resistance. Vascular responses of both dog and perfused foreleg to endotoxin may be reproduced by histamine infusion.^{21, 32} The local vasodilatation, produced by histamine is ultimately replaced by vasoconstriction due to catecholamine-like agents released in response to systemic arterial hypotension. Infusions or injections of both histamine and endotoxin in small sublethal amounts decrease renal vascular resistance.^{26, 29, 32} This decrease is also produced by administration of pyrogenic inulin.³

Portal venous pressure elevation and hepato-splanchnic pooling in response to intravenous injections of histamine⁴ or endotoxin^{4, 39} are adequately blocked by phenoxybenzamine in the dog. This observation lends strong support for the early release of his-

tamine after endotoxin and its important role in the development of pooling and systemic hypotension. Recent studies^{2, 56} corroborate the role of histamine in endotoxin shock: Significant beneficial effects of antihistaminics were observed in dogs. Phenoxybenzamine blocks the vascular constrictor responses to epinephrine. Catecholamine release, however, does not appear to produce early pooling and the precipitous fall in systemic arterial pressure in the dog, since these agents are released subsequent to the development of hypotension.^{30, 32}

Responses of the dog and monkey to injected histamine are markedly different. However, within each species, responses to these agents are remarkably similar in certain respects, as illustrated in table I.

A recent study⁴ has brought attention to important differences in regard to the protective actions of antihistaminic agents: Methapyriline and diphenhydramine in the dog effectively block portal venous pressure elevation to injected histamine and prevent hepato-splanchnic pooling. The degree of portal venous pressure elevation and pooling are unaltered however, when endotoxin is given after the antihistaminic agents. At face value, these results appear to offer substantial evidence against the participation of histamine and its subsequent action on the hepato-splanchnic bed. Phenoxybenzamine, however, has proven to be a very effective antihistaminic agent.⁴ This agent may be more beneficial than other antihistaminics in obliterating the characteristic action of histamine released in close proximity

RESPONSES OF DOG AND MONKEY TO HISTAMINE AND ENDOTOXIN

Measurement	Dog		Monkey	
	Histamine	Endotoxin	Histamine	Endotoxin
Systemic arterial blood pressure	Marked decrease	Marked decrease	Modest decrease	Gradual decrease
Portal vein pressure	Marked increase	Marked increase	Negligible increase	Negligible increase
Hematocrit	Marked increase	Marked increase	No change or decrease	No change or decrease

Table I

to the site of action, *i.e.*, the hepatic venules. It is of interest that phenoxybenzamine blocks only the venous response to injected histamine while the arterial response is undiminished.⁴

Endotoxin and the histamine releaser 48/80, have some individualized vascular effects when administered one after the other.³² When 48/80 is injected intravenously in the dog one hour after endotoxin, there is a progressive drop in total peripheral resistance (TPR) and an increase in portal venous pressure. Results show a fundamental difference in the systemic arterial blood response of suckling pups to endotoxin and 48/80. The effect of endotoxin on the immature dog resembles the action of endotoxin after injection of 48/80 in the adult in that systemic arterial pressures decline gradually in contrast to the precipitous fall observed in adult dogs. Pups, on the other hand, are very sensitive to 48/80, responding with a rapid fall in arterial pressure.³²

Histamine release early after endotoxin should result in a decrease in total peripheral resistance (TPR) in endotoxin treated animals.⁶ The TPR, however, is relatively constant during the first several minutes after endotoxin in the perfused dog.^{28, 60} Histamine injection in contrast, elicits a marked drop in TPR.⁴ If histamine is liberated shortly after endotoxin and prior to catecholamine release, its characteristic effect on TPR is notably absent. At face value, it thus appears that an early role of histamine in eliciting arteriolar dilatation in the dog is questionable, although regional decreases in resistance may occur.³⁰ It is possible that the highest concentration of histamine is at the site of the hepatic venules, and that the initial circulating level of histamine is ineffective in eliciting a generalized decrease in total peripheral resistance. Constrictor agents^{9, 40, 52, 56} also may be simultaneously released with histamine so that the TPR does not change appreciably in the early phase of shock.

These observations suggest that the vascular response to endotoxin is exceedingly complex. Although the actions of histamine and endotoxin are distinctly similar in certain instances, unexplainable differences

clearly exist. To account for the differences in the vascular actions of endotoxin and 48/80, it is possible that each agent liberates histamine at different rates from varying storage sites, that both cause the elaboration of vasoactive agents other than histamine, and each has its own peculiar direct effects.³²

III. *The development of irreversible shock.* Dogs administered a lethal injection of endotoxin ultimately show a deterioration following a period of partial recovery, as described in the previous section. The onset of deterioration represents the beginning of the period of irreversibility and is terminated by death within three to 24 hours. The development of progressive systemic hypotension in the dog is accounted for on the basis of decreases in total peripheral resistance^{13, 25, 28} and cardiac output.^{25, 28, 60}

Mean systemic arterial blood pressure is the product of total peripheral resistance and cardiac output. The following schema has been developed to explain the various hemodynamic alterations influencing vascular resistance and cardiac output, resulting in irreversible systemic hypotension. These relationships have been obtained from experiments on the dog. Increases in intravascular and extravascular pooling progressively decrease venous return both in the early and later stages of endotoxin shock.^{4, 28, 30, 60} This is brought about largely by the combined effects of generalized venous constriction and increased responsiveness of the post-capillary segment to circulating pressor agents.^{30, 31, 62} Decreases in responsiveness to pressor agents,³⁰ increases in responsiveness to depressor agents,³⁰ and a delayed progressive peripheral vasodilatation of pre-capillary vascular segments combine to give a decrease in total peripheral resistance. It is thus seen that the net effect of a variety of perverse pre-capillary and post-capillary vascular responses is irreversible systemic hypotension. Histamine-like agents appear to bring about detrimental effects in both pre-capillary and post-capillary segments because of their influence on peripheral resistance and pooling.^{4, 6, 32} A profound perversity is seen with epinephrine, which assumes a histamine-like character, particularly in regard to the post-capillary segment^{30, 31} resulting in progressive pooling. A drop in vascular resistance

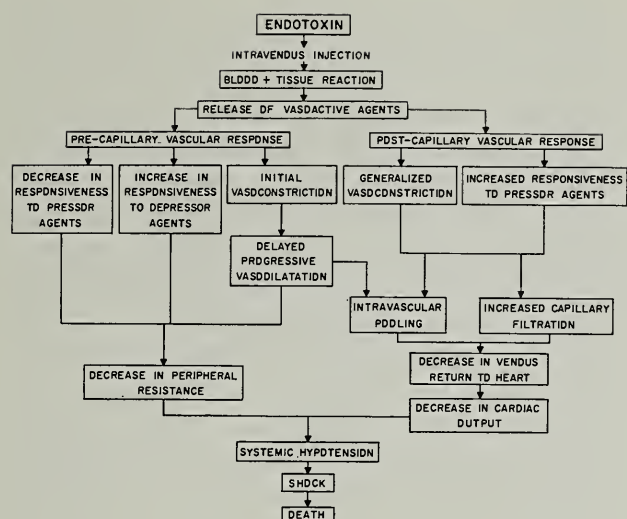


Figure 2. Schema illustrating the effects of endotoxin on pre-capillary and post-capillary vascular segments.

is due to decreased responsiveness of pre-capillary vessels to circulating pressor agents.³⁰

Figure 2 summarizes the role of pre-capillary and post-capillary vascular segments in the early and delayed response to endotoxin. The net effects of these changes are decreases in peripheral resistance and cardiac output. The product of these quantities is irreversible system in hypotension.

IV The significance of species differences in the response to endotoxin.

The discussion in the present paper has largely been concerned with findings in the dog. Interesting implications have arisen as a result of recent publications on two species of monkeys given lethal injections of endotoxin.^{27, 42} The initial vascular response of the monkey is remarkably dissimilar to that of the dog: A gradual fall in systemic arterial pressure is observed, even with overwhelming doses of endotoxin; there is no pooling in the hepato-splanchnic bed and apparently no loss of circulating blood to extra-vascular compartments. The monkey, however, dies following gradually developing systemic hypotension in much the same manner as the eviscerated dog.⁴⁵ Possible similarities in the post-endotoxin response of man and monkey have been suggested.²⁷ Because of the relative phylogenetic proximity of monkey to man, findings in the monkey which appear to be in conflict with those in the dog cannot be ignored. The gross dif-

ferences in the dog and monkey bring to question the relevance of data on dogs in relation to man, particularly in regard to the role of the hepato-splanchnic bed.^{43, 44, 57}

A variety of parameters has been measured during the post-endotoxin period in the dog and monkey and the results of these are shown in Table II. Findings suggest that irreversible shock in the monkey is not caused by hepato-splanchnic pooling in either intravascular or extravascular compartments. The role of the central nervous system in the monkey has not been assayed, but nervous factors may perform a predominant role in the development of peripheral vasodilatation.^{55, 59} There is evidence of the combined actions of vasoactive agents in producing progressive peripheral vasodilatation and some degree of intravascular pooling in peripheral regions. These may account for the development of irreversible shock in the monkey.^{15, 16, 27, 42}

V Cardiovascular factors to be considered in the response to endotoxin.

Figure 3 is a schema to show the possible influences of the geometric (vessel radius) component of resistance and blood flow (V) on systemic arterial pressure. The drop in pressure (AP) in the systemic circuit (aortic-right atrial pressure) is directly proportional to the cardiac output (V) and inversely related to the fourth power of net vessel radius.

THE EFFECT OF ENDOTOXIN IN THE DOG AND MONKEY

Post-endotoxin measurement	Dog	Monkey
Systemic arterial pressure	Rapid drop	Gradual decline
Cardiac output	Decrease	Decrease
Venous return	Decrease	Decrease (?)
Total peripheral resistance	Variable; decrease	Decrease
Portal vein pressure	Marked early increase	Negligible increase
Visceral pooling	Extensive	Absent
Visceral lesions	Extensive	Absent or minimal
Foreleg vascular resistance	Decrease to sustained rise	Decrease; increase
Foreleg venous segment resistance	Sustained Rise	Decrease; increase
Heart rate	Early decrease	Variable
Hematocrit	Marked increase	No change or fall
Plasma Hemolysis	Extensive	Absent
White cell count	Marked decrease	Marked decrease

Table II

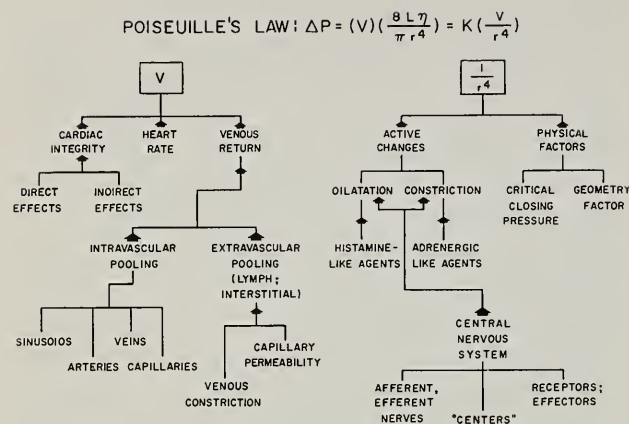


Figure 3. The ultimate effects of endotoxin on systemic arterial pressure as a result of changes in vessel radius and cardiac output.

Vessel diameter. Possible factors influencing vessel diameter are shown in the right portion of the figure. Active changes due to elaboration of dilator and constrictor agents were considered in section II above. Of importance in this regard, is recent work⁵⁵ that sensitization of the carotid sinus apparatus in shock may result in reflex systemic hypotension. The elaboration of catecholamines in endotoxin shock may stimulate the pressoreceptors of the carotid sinus, causing them to discharge impulses at higher than normal rates. Topical application of catecholamines to the carotid sinus region is known to stimulate the carotid sinus pressoreceptors.²² These influences may account for the decrease in peripheral resistance reported in endotoxin shock. The precise role of the central nervous system in endotoxin shock is unknown. Its role in early hepato-splanchnic pooling is relatively unimportant⁶¹ but it appears to be an essential component in the release of catecholamines from the adrenal medulla¹² and in the development of bradycardia⁵⁴ during the early hypotensive period. Cholinergic-like effects of endotoxin in the dog have been observed⁵⁸ and the release of acetylcholine would explain a number of cardiovascular alterations produced by endotoxin.³⁵ A possible pathological role of the central nervous system in promoting the development of irreversible shock must await further investigation.

These previous factors may perform crucial roles in the development of active changes in vessel radius. At least two physical factors not necessarily involving neuro-humoral components, must also be considered: (a) Critical closing pressures (CCP) have been reported in various vascular beds^{5, 49} though not observed in others.^{17, 36, 37, 38} The sudden possible obliteration of blood flow in regional beds due to critical closing at low systemic arterial pressures should be evaluated. (b) The passive geometric factor of resistance at low cardiac outputs will result in a higher than normal peripheral resistance, since at low flows, resistance increases as a function of passive decreases in vessel diameter.^{18, 51} This factor has been evaluated in endotoxin shock.^{25, 56}

Blood flow: The influence of decreased venous return on arterial blood pressure in endotoxin shock has been previously discussed. Marked bradycardia commonly observed in endotoxin shock may also influence cardiac output. Involvement of the carotid sinus mechanism described above⁵⁵ may account for the appearance of bradycardia. A decreased heart rate, however, is not observed in the monkey.²⁷ Possible direct effects of endotoxin on cardiac integrity have been studied by several investigators^{1, 7, 8, 11, 13, 20, 45, 50} during hemorrhagic hypotension and endotoxin shock. In general, only indirect effects resulting from low blood flow and diminished tissue perfusion appear to damage cardiac tissue.¹

SUMMARY

A review of work carried out on dogs and monkeys has described the roles of vaso-active agents released by endotoxin. The intravascular introduction of lethal injections elicits a series of complex responses involving certain blood constituents and tissues. A histamine-like response occurs immediately after injection of endotoxin in the dog. This results in a rapid fall in systemic arterial pressure due to a decrease in venous return. Histamine appears to be a trigger device in the early response to endotoxin, resulting in the release of catecholamines following the development of systemic hypotension. Data have been presented regarding the role of histamine in endotoxin shock. Responses of dog and monkey to histamine and endotoxin are grossly different,

but within a given species show definite similarities. Findings suggest that the effects of circulating vasoactive agents are important in the development of irreversible shock. Perverse vascular responses to histamine and catecholamine-like agents enhance the development of irreversibility. Responses in the dog are altered so that there is net dilatation in pre-capillary vascular segments and net constriction in post-capillary segments. The ultimate effect of this perversity of responses is a tendency for a drop in total peripheral resistance and a progressive decrease in cardiac output (venous return), leading to the progressive development of systemic hypotension. The response of the monkey to endotoxin is in marked contrast to that of the dog. Irreversible shock in the monkey is not caused by hepato-splanchnic pooling. Gross differences between the dog and monkey in response to endotoxin implies phylogenetic variability, thus creating difficulties in comparing data from the dog with the suspected responses of man.

An analysis of the geometrical components of Poiseuille's Law has suggested both active and passive changes in vessel radius, leading to a decrease in vascular resistance. Total peripheral resistance under conditions of low cardiac output, must be considered in the light of both passive and active changes in vessel diameter. Results from a number of investigations indicate that the primary cause of a decrease in cardiac output in endotoxin shock is a progressive decrease in venous return. There is insufficient evidence for a direct action of endotoxin on the heart. □

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ABSTRACTS

AN INTERESTING CAUSE OF HEART FAILURE

The subject of this report developed large hemangiomas in the sixth month of her pregnancy. These occurred rather suddenly and were described as large, pulsating, soft and spongy. They ranged in size from 1.5 cm to nine cm and there was a thrill and audible bruit associated with them. The patient developed heart failure. Digitalis and pressure over the hemangiomas were used in treatment. One week following delivery all tumors seemed to be rapidly regressing and a month later scarcely a trace of the lesions remained. Three members of the patient's immediate family showed various types of vascular nevi.

EDITOR'S NOTE: This is an extremely interesting case of a patient developing significant arterio-venous fistulae under the influence of pregnancy.

Cardiac Failure Due to Endocrine Dependent Hemangiomas, O'tar T. Norwood, M.D., and Mark A. Everett, M.D., *Archives of Dermatology*, 89: 759-760, May, 1964.

MEDICAL STUDENT ATTITUDES TOWARD FOUR MEDICAL SPECIALTIES

This study was designed to explore the medical student's stereotypes, or trait characterizations, of four medical specialties: surgery, internal medicine, psychiatry and general practice. It differed from previous work in that it also examined (a) pre-clinical and clinical differences in stereotyping; (b) differences between the specialty characterizations of students who plan to enter and students who do not plan to enter one of the four specialties; and (c) students' self-trait characterizations according to their planned specialties.

A questionnaire developed by the World Federation for Mental Health was given to 343 students attending the University of Oklahoma School of Medicine. Analysis of the data so obtained revealed that medical students in both pre-clinical and clinical years show

considerable agreement in their perceptions of traits salient to the four specialties. Of considerable interest was the implication that although students entering a particular specialty emphasize the positive traits of their specialty, their stereotype does not differ greatly from the stereotype of students not selecting that specialty. It was also learned that characterizations of medical specialties as seen by pre-clinical students are not based on naive or distorted perceptions, but are in fact very similar to the specialty characterizations of clinical students electing these specialties. This article should be read in its entirety by anyone interested in the medical student's evaluation of the various specialties. It is interesting to note in particular, the rather high regard they hold for the general practitioner.

John G. Bruhn, Ph.D. and Oscar A. Parsons, Ph.D., *Journal of Medical Education*, 39: 40-49, 1964.

RECENT PUBLICATIONS

The *Journal* welcomes the opportunity to list current publications by any Oklahoma physician.

Central Nervous System Effects of Chronic Exposure to Organophosphate Insecticides, J. Robert Dille, M.D., and Paul W. Smith, Ph.D., *Aerospace Medicine*, Vol. 35, No. 5, May, 1964.

Diagnosis of Disorders of the Ureterovesical Junction, Wm. L. Parry, M.D. *New York State Journal of Medicine*, 64: 6, 744-747, Mar. 15, 1964.

The Behavioral Science Correlation Clinic as a Teaching Device, A. Paredes, *J. Med. Education*, 39: 58-64, 1964.

Anthelmintic Therapy: A Simplified Approach, Everett C. Bracken, *Southern Medical Journal*, 57: 227-30, Feb., 1964.

Reprints of the above publications are usually available on request from the senior author, c/o Mrs. Joan Campbell, Veterans Administration Hospital, 921 N.E. 13th Street, Oklahoma City, Oklahoma.

Asymmetry of Radial Artery Pulsations in A Young Woman

JOHN NAUGHTON, M.D.
Instructor in Medicine

OCCLUSIVE VASCULAR disease is usually encountered in middle-aged and older populations. The clinical manifestations may be expressed in various forms such as coronary artery disease, cerebral insufficiency or intermittent claudication. Its occurrence in young individuals often presents a problem in differential diagnosis and management. The following report illustrates such a problem in a young woman.

CASE REPORT

C. L. was a 24-year-old white woman with a chief complaint of numbness in her right arm for six months. This sensation was precipitated by ironing. Five or six years earlier weak pulses had been detected in the right arm and the patient was told that she had unequal blood pressure recordings. Her only pregnancy, at age 21, was complicated by pre-eclampsia. There was no history of trauma, sustained hypertension, diabetes mellitus or ergotism.

Physical examination revealed a healthy appearing white woman. Blood pressures were 80/50, right arm; 110/80, left arm; and 110/80, both legs. The right brachial artery pulsation was weak and the right radial artery was not palpated. The remainder of the peripheral pulsations were strong and synchronous. There was regular sinus rhythm with $P_2 > A_2$ and normal heart size. A grade iii/vi systolic ejection murmur was heard in the second right intercostal space, over the base of the neck and over the right shoulder. The murmur did not radiate to the back. The upper extremities were warm, symmetrical and strong.

Laboratory studies, including ECG and chest roentgenogram were normal. Retrograde arterial catheterization revealed a gradient in systolic pressure across the right subclavian artery. The systolic pressure was 112 mm Hg in the axillary artery, 98 mm Hg in the subclavian artery and 180 mm Hg in the aorta. Angiograms demonstrated narrowing of the distal portion of the right subclavian artery from the scalene muscle to 2.0 cm past the outer margin of the first rib. There was reflux filling of collateral vessels. The axillary artery appeared normal.

From the Department of Medicine and the Neurocardiology Research Program of the University of Oklahoma Medical Center, Oklahoma City, Oklahoma.
Produced under the auspices of the Professional Education Committee of the Oklahoma State Heart Association.



A representative angiogram demonstrates the narrowed segment of the right subclavian artery extending from the scalene muscle to a point 2.0 cm distal to the first rib. Reflux filling of collateral vessels proximal to the site of the occlusion is seen. The right axillary artery appears normal.

DISCUSSION

These diagnostic procedures demonstrated that the patient had occlusive vascular disease of unknown etiology. This lesion undoubtedly accounted for this patient's asymmetrical pulsations and blood pressures and for the hemodynamic murmur.

Innumerable possibilities could have caused the occlusion. The most likely diagnosis is that she has a localized area of arterial thrombosis. The lesion could be secondary to trauma, localized infection or paratuberculosis. Her history did not aid in defining a specific etiology. Other possibilities to be considered in the differential diagnosis are thromboangiitis obliterans, polyarteritis nodosa, ergotism, systemic lupus erythematosus and pulseless disease (Takayasu's).

The necessity of making a definitive diagnosis of either thromboangiitis obliterans or arteriosclerosis obliterans has been questioned in recent years. A review of 268 cases of occlusive peripheral vascular disease by McPherson demonstrated the validity of such a differentiation. All of these patients were 45 years of age or less. Those diagnosed as

thromboangiitis obliterans had incidents of peripheral vascular ischemia complicated by ulceration and gangrene which necessitated amputation; their life expectancy was comparable to a normal, healthy population. In contrast to this group the patients with arteriosclerosis obliterans had no episodes of peripheral ischemia, but they had a definitely shortened life expectancy often complicated by myocardial infarction. This clinical study lends credence to those pathological studies that indicate thromboangiitis obliterans is a different disease from arteriosclerosis obliterans.

This occlusive lesion demonstrates how Bernoulli's principle manifests itself clinically. In 1726, he wrote, "Where the velocity of flow is greatest, the lateral pressure against the wall is least." This law states that the total energy, *i.e.*, pressure energy plus kinetic energy, remains constant. The velocity of blood increases when a blood vessel's lumen is narrowed. Since the total energy must remain constant the lateral pressure will be reduced by a factor equal to the kinetic energy of flow. The gradual reduction in lateral pressure promotes further occlusion of the vessel. Only when the pressure reaches zero will reopening or recanalization be promoted. The Bernoulli principle applies to any atherosclerotic occlusive process, whether it be in the subclavian artery or in the coronary arteries.

The clinical management of this patient's condition is supportive and symptomatic. Adequate collateralization has prevented vascular insufficiency in her right arm. She should be evaluated periodically for claudication, vascular lesions in other sites and for evidences of other systemic disease.

Patients with occlusive vascular disease should be advised to stop smoking. Proper care of the nails and feet should be stressed in an attempt to prevent unnecessary complications in an area of diminished arterial blood supply. While their course is asymptomatic and uncomplicated they should be encouraged to live a normal life. With the exception of maintaining a normal caloric intake, dietary manipulation is probably of no value in this group of diseases. □

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18th Clinical Convention of the AMA

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DON'T MISS THE WINTER'S BIGGEST MEDICAL MEETING

Regional, National Meetings Scheduled For Oklahoma City Next Month

Oklahoma City will play host in October to two important meetings of national interest.

First, a two-day Regional Conference on Aging and Long Term Care will be sponsored jointly by the American Medical Association and the Oklahoma State Medical Association.

This conference will be conducted simultaneously with another major medical meeting, further adding stature to Oklahoma City's claim as one of the nation's leading convention sites—the eighth annual meeting of the American Association of Medical Assistants.

Both conferences were struck by the tragic September 3rd death of the featured speaker, Norman A. Welch, M.D., President of the American Medical Association from Boston, Massachusetts. Doctor Welch, who died of a stroke in Wyoming, was scheduled to address luncheons at both events and, while in Oklahoma, was to be entertained by officers of the OSMA and Blue Cross-Blue Shield.

He will be replaced on the programs by Doctor Donovan Ward, new president of the AMA.

Conference on Aging

Oklahoma City's Skirvin Hotel will be the site of the AMA's Conference on Aging, October 15th and 16th, when representatives of Oklahoma, Arkansas, Missouri, Kansas, Texas and Louisiana will gather to discuss the needs of older people in such areas as employment, health maintenance, adult education, service to the community and preparation for later years. In addition, conference participants will review new developments in facilities and programs

for care of long-term patients of all ages, and ways of financing long-term care.

The purpose of the conference is to stimulate joint action at state and local levels between medicine and other groups with interest and knowledge in the fields of aging and chronic illness.

Conferees will represent health agencies and professions, and other groups such as agriculture, business, labor, churches, schools, women's organizations, service clubs, retired person's organizations, communications media, and elected state and county officials.

Oklahomans to Participate

OSMA President Harlan Thomas, M.D., Tulsa, will introduce Doctor Ward at the Saturday luncheon banquet which concludes the two-day conference.

Other Oklahomans slated to appear on the program are Albert J. Glass, M.D., Director of the Oklahoma State Department of Mental Health, Hayden H. Donahue, M.D., Chairman of the OSMA's Council on Public Health, and The Reverend Joseph Shackford, of Oklahoma City's St. Luke's Methodist Church.

Oklahoma City Mayor George Shirk will welcome conferees to Oklahoma City.

According to Doctor Donahue, all Oklahoma physicians should consider the meeting a command performance. "As physicians, we have very definite responsibilities of leadership in the health climate of our communities, and the conference will provide us with a roundup of the latest developments in the important areas of aging, chronic illness and

long-term care. I am hopeful that several hundred Oklahoma physicians will turn out for the meeting."

Other headliner speakers include Dean W. Roberts, M.D., Executive Director of the National Commission on Community Health Services, Bethesda, Maryland; A. B. Halverson, Vice-President, Occidental Life Insurance Company, Los Angeles; W. E. Beaumont, Jr., President of the American Nursing Home Association, Little Rock; and Charles Donnelly, D.D.S., Dental Consultant to the U.S. Public Health Service.

Medical Assistants Meeting

The role of the medical assistant in emergencies, a certification workshop and talks by Doctor Ward of the American Medical Association and Henry Bellmon, governor of Oklahoma, will highlight the eighth annual convention of the American Association of Medical Assistants October 13th-18th in Oklahoma City.

More than 700 physicians' aides are expected to attend the meeting at the Sheraton-Oklahoma Hotel, according to Mrs. Judy Coleman, Dallas, president.

The officers of the Oklahoma State Medical Assistants Society have extended a special invitation to all Oklahoma physicians and/or their office assistants to attend the convention.

"We need you and we want you to join us, to observe our business sessions as well as to participate in the education programs," said Miss Gerry Schwarz, Oklahoma City, chairman of the national convention. Mrs. Veronica O'Brien, Oklahoma City, President of the Oklahoma group, said, "Our intent is to help provide



DOCTOR WELCH

AMA President, Doctor Norman Welch, Dies of Stroke in Wyoming

Norman A. Welch, M.D., popular new President of the American Medical Association, died September 3rd in Jackson, Wyoming, almost twenty-four hours after suffering a massive cerebral hemorrhage.

The internist from Boston, Massachusetts, was chosen president-elect of the AMA by acclamation in 1963 and was installed as president at the San Francisco meeting in June, 1964. He had been a member of the AMA House of Delegates since 1951, and served as speaker from 1959 until his selection as president-elect.

Doctor Welch was born July 10th, 1902, in Brockton, Massachusetts,

and graduated from Tufts' Medical School in 1926.

From 1933-54, he was instructor in medicine at the Boston University School of Medicine, and from 1943-57, he was clinical professor of medicine at Tufts and physician-in-chief at Carney Hospital, Boston.

He had been president of the Massachusetts Medical Service (Blue Shield) since 1950 and was chairman of the National Blue Shield Commission from 1955-58. In addition, he was a past-president of the Council of the New England Medical Society.

Doctor Welch is survived by his wife, four daughters and one son.

for our self-improvement, and help us become more efficient employees."

Registration fee is \$30.00. For more information, medical assistants may write to Mrs. Stella Thurnau, AAMA Executive Secretary, 510 North Dearborn Street, Chicago, Illinois, 60610.

The convention officially opens Wednesday, October 14th, when the House of Delegates, AAMA's policy-making body, convenes for a two-day session.

A leadership symposium on the duties, responsibilities and legal aspects of the medical assistant in a clinic, solo practice or community emergencies will be a feature of the general session Friday, October 16th. Doctor Harlan Thomas, President of the Oklahoma State Medical Association, will join Governor Henry Bellmon in welcoming conference participants.

Participants of the opening symposium will be: Robert F. McCool, M.D., Clarion, Iowa; Robert S. Warner, M.D., Coatesville, Pennsylvania; Mr. Hilton E. Vilen, secretary, Disaster Committee, Mayo Clinic, Rochester, Minnesota, and Mr. Richard Bergen, Law Department, American Medical Association, Chicago. This symposium is sponsored by Wyeth Laboratories.

An educational program is slated for the Saturday morning session. Donald L. Cooper, M.D., director, Oklahoma State University Hospital and Clinic, will pose the question, "What Is Fitness?" Milford O. Rouse, M.D., speaker, AMA House of Delegates, will discuss "Medical Democracy in Action," and Elvin M. Amen, M.D., Bartlesville, Oklahoma, will speak on "Communist Weapons in the Continuing Cold War."

AMA President Ward will be luncheon speaker for that day.

Two workshops will be held Saturday afternoon: "Certification for Medical Assistants," moderated by Mrs. Mary Kinn, Santa Ana, California, chairman, AAMA Certifying Board; and "Problem-Solving Clinics," conducted by Mrs. Marian Little, Cedar Rapids, Iowa, chairman AAMA Education Committee.

Mrs. Rose Merritt, Savannah, Georgia, will be installed as president of the 12,000-member organization at the Saturday banquet. Guest speaker will be G. Robert Gadberry, vice-president, Fourth National Bank and Trust Company, Wichita, Kansas.

Convention social activities include a chuck wagon dinner, the President's luncheon, a special tour of Oklahoma City, and a Sunday breakfast. The convention ends Sunday, October 18th. □

Speakers Named For Oklahoma City Clinical Society

The Oklahoma City Clinical Society will open its thirty-fourth annual three-day conference at the Sheraton-Oklahoma Hotel on October 26th, 1964.

An outstanding program of post-graduate teaching which includes lectures and discussions by fifteen distinguished speakers selected from various medical teaching centers throughout the nation, has been arranged.

In addition to the general assemblies, there will be specialty lectures which will be held in adjacent classrooms and the subject matter will not interfere with the current lectures before the general assembly; breakfast meetings to be held on Tuesday morning at 7:30 a.m. in the specialties of surgery, medicine and orthopedics; round-table luncheon meetings for the medical and surgical groups; and a clinical pathologic conference.

On Monday evening there will be specialty group dinners honoring the guest speakers. Members and associate members may attend the group dinner of their choice.

The annual banquet honoring guest speakers and associate members and

their wives will be held on Tuesday evening in the Persian Room of the Skirvin Tower Hotel. This is the one meeting of the conference to which physicians may take their wives and guests. Associate members and their wives will receive complimentary tickets. Special musical entertainment will be provided following the dinner.

A fine program of entertainment is being planned for the wives of attending physicians, which will include a style show and luncheon.

Speakers Listed

Those appearing on the program will be: George N. Austin, M.D., (Orthopedic), University of Missouri Medical Center, Columbia, Missouri; Rudolf L. Baer, M.D., (Dermatology), New York University School of Medicine, New York City; Oliver H. Beahrs, M.D., (Surgery), Graduate School, University of Minnesota, Rochester, Minnesota; Herschel P. Bentley, Jr., M.D., (Pediatrics), Medical College of Alabama, Birmingham; Maxwell G. Berry, M.D., (Medicine), University of Kansas School of Medicine, Kansas City, Kansas; John Scott Dunbar, M.D., (Radiology), McGill University Faculty of Medicine, Montreal, Canada; Robert R. Franklin, M.D., (Obstetrics), Baylor University College of Medicine, Houston;

Stanley R. Friesen, M.D., (Surgery), University of Kansas School of Medicine, Kansas City, Kansas; Miles A. Galin, M.D., (Ophthalmology), Cornell University Medical College, New York City; John S. Garvin, M.D., (Neurology), University of Illinois College of Medicine, Chicago; John B. Hazard, M.D., (Pathology), Western Reserve University School of Medicine, Cleveland, Ohio; Blaine E. McLaughlin, M.D., (Psychiatry), Woman's Medical College of Pennsylvania, Philadelphia; Bruce Proctor, M.D., (Otolaryngology), University of Michigan Medical School, Ann Arbor; Humbert L. Riva, M.D., (Gynecology), Seton Hall College of Medicine, Jersey City, New Jersey; and, Oliver G. Stonington, M.D., (Urol-

ogy), University of Colorado School of Medicine, Denver.

Eighteen hours credit for the conference has been approved by the American Academy of General Practice.

A registration fee of \$25.00 covers all events for the meeting. Advance registration may be mailed to the Oklahoma City Clinical Society, 2809 Northwest Expressway, Oklahoma City, Oklahoma. □

OSMA Awards Medical School Scholarships

Joe L. Duer, M.D., Woodward, past-president of the association and current chairman of the Financial Aid to Education Committee, appeared at September 3rd indoctrination ceremonies for the freshman class at the University of Oklahoma School of Medicine and presented OSMA scholarships to five academically outstanding students.

Recipients of the medical associations \$500.00 awards were: Raymond L. Cornelison, Jr., Oklahoma City, Sherman B. Lawton, Norman, Sidney R. Matthews, Wilson, Alan D. Menefee, Ada, and Gary E. Moore, Wellston.

Mr. Cornelison is the son of Mr. and Mrs. R. L. Cornelison, Oklahoma City. He is a graduate of Oklahoma City Northwest Classen High School and completed his premedical education at Oklahoma City University.

Mr. Lawton received his high school education at Norman and graduated this spring from the University of Oklahoma. He resides in Norman with his parents, Professor and Mrs. Sherman P. Lawton.

Mr. Matthews, a graduate of Lone Grove High School and Northwestern State College of Louisiana, resides with his parents, Mr. and Mrs. Cecil Matthews, in Wilson, Oklahoma.

Mr. Menefee is the son of Mr. and Mrs. Bill H. Menefee, Ada. He was educated at Ada High School and East Central State College in Ada.

Mr. Moore graduated from Wellston High School and Oklahoma City University. His parents are Mr. and Mrs. James M. Moore of Wellston.

The scholarship awards were actually announced early in the year by J. Hoyle Carlock, M.D., Ardmore, who was then chairman of the OSMA Financial Aid to Education Committee. The current committee is comprised of Doctors Carlock and Duer, and Doctors Rex E. Kenyon, Oklahoma City, Harlan Thomas, Tulsa, and Clinton Gallaher, Shawnee.

OSMA's financial assistance program for medical students at the University of Oklahoma School of Medicine consists of scholarships, loans, and non-refundable grants-in-aid. Funds are raised each year through the earmarking of \$5.00 from the annual OSMA dues of each member of the association.

The scholarship portion of the assistance program is specifically aimed at attracting Oklahoma's top pre-medical students to the O.U. school, and, in addition, provides for official recognition of academic achievement by the state's physicians. All first-year students with "B" averages or better are eligible to apply for OSMA scholarships through the Associate Dean of Student Affairs, Doctor Philip Smith. Applicants are screened and awards made on the basis of overall undergraduate grade averages, averages in the required science courses, and medical school entrance examination scores.

OSMA loans are based upon the economic need of the students who make application through Doctor Smith. Since the association's House of Delegates authorized the program in 1961, twenty-six loans have been granted in the aggregate amount of \$8,400. The balance in the loan program at the present time is \$8,955.12, but a large number of applications will be considered by the committee on September 13th.

The loans bear only two per cent simple interest, and such interest does not accrue until after the student has finished his medical training.

Grants-in-aid are available to students to help them meet short-term financial emergencies. Re-payment is encouraged but is not mandatory. □

Professional Liability Conferences Planned

In an effort to stem the tide of unmeritorious professional liability claims against Oklahoma physicians, the OSMA Council on Insurance has announced the tentative scheduling of fourteen district meetings throughout the state.

According to Council Chairman Dave B. Lhevine, M.D., Tulsa, the meetings are designed to increase the physicians' awareness of professional liability pitfalls and to educate them in medico-legal matters of a preventive nature.

Meeting sites are being arranged on the basis of OSMA Trustee Districts. Trustee Districts to be covered and the cities selected within the districts are: District I — Vinita and Bartlesville; District II — Ponca City; District III — Enid; District VI — Oklahoma City; District VII — Norman and Shawnee; District VIII — Tulsa; District IX — Muskogee; District X — McAlester and Poteau; District XII — Ada and Ardmore; District XIII — Lawton.

Physicians in the suggested meeting sites are now being contacted and asked to assist in local planning and promotion.

Claims Up

The malpractice claims picture in Oklahoma and elsewhere has taken an unfavorable trend during the past few years. Due to a high incidence rate of claims and resultant defense costs and losses, insurance premium rates in the state have been raised in 1963 and 1964, a situation which demands the attention of physicians, hospitals, defense attorneys and insurance companies. Many of the claims are medically defensible, but too often the position of the defendant has been weakened through poor medical records and other factors which bear directly on the legal defense.

Through the use of defense attorneys, insurance agents and claims adjusters as speakers, Doctor Lhevine hopes the district meetings will

stamp out medico-legal naivete and result in saving Oklahoma physicians from unnecessary professional liability costs and embarrassment.

Good Cooperation

"The insurance company which protects the majority of Oklahoma physicians, St. Paul Fire and Marine, is cooperating in the claims prevention effort," Lhevine said, "and our mutual concern over the current trend in incidence rates has brought about the finest possible relationship between the insurance company's executive officers and the OSMA Council on Insurance.

"I believe we have reached a much clearer understanding of the many medical, social, legal and economic factors which influence malpractice claims," he continued, "so if there is a bright side to adversity, it is that we have never before enjoyed the degree of close rapport that we now have with St. Paul. Together, I am confident that the overall picture can be improved in the years ahead, and that Oklahoma will be restored as one of the leading states where a physician can practice his science and art in relative freedom from legal harassment."

While time and distance will limit the number of meetings to be pre-scheduled for the year, Doctor Lhevine says the Council on Insurance will endeavor to provide a similar program to any county medical society not otherwise covered. □

Oklahoma Rheumatism Society To Hold Annual Meeting

Plans have been announced for the annual meeting of the Oklahoma Rheumatism Society to be held October 25th, 1964, in the Oklahoma-Sheraton Hotel. The one-day meeting will convene at 9:00 a.m. and adjourn at 4:00 p.m.

Principal speaker for the event will be Donald F. Hill, M.D., an internist from Tucson, Arizona. His subject will be "The Medical Management of

Rheumatoid Arthritis and Osteoarthritis."

The meeting will be jointly sponsored by the Oklahoma Rheumatism Society and the Oklahoma Chapter of the Arthritis and Rheumatism Foundation. □

OSMA Committee on Immunization Created

As a result of action taken July 26th by the OSMA Board of Trustees, the formation of a special three-man Committee on Immunization was authorized.

The Trustees, at the request of the Council on Public Health, authorized Harlan Thomas, M.D., OSMA President, to appoint the three-man Committee on Immunization, whose function would be to work with and assist the State Health Department in developing and implementing a statewide year-round program on immunization education.

President Thomas has selected the committee, but their acceptance was not confirmed at the time of *Journal* publication.

According to Hayden H. Donahue, M.D., Chairman of the OSMA's Council on Public Health, the need for creating such a committee was made evident when the Council recognized it was unable to sustain a statewide immunization education program on a year-round basis. The chairman noted that resolutions have been approved the past several years by the OSMA House of Delegates, calling for such year-round programs. Doctor Donahue concludes that because of increased emphasis by the Council in the field of mental health and other areas of public health requiring increased participation, and since the State Health Department was granted \$160,000 last year to use in the field of immunization education, the logical move was to form the Committee on Immunization to assist the State Health Department in devising a sound educational program embodying principles set forth by the OSMA. □



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President's Page . . .

(Continued from Page 418)

included, as opposed to twelve representatives from hospitals. A loaded council like this can completely control the practice of medicine.

For example, a surgeon may be told that he must accept a service contract, at a fee set by a lay board. If he refuses, he may be told to practice surgery somewhere else. But, alas, he finds that all hospitals have the same rules, and he then has the choice of taking the prescribed fee or getting out of town. Building his own hospital to achieve freedom is not a likely answer either, since the planning council won't see any need for new beds in the area.

Far fetched? Perhaps so, but not if you look down the road, and not if you consider that Areawide Planning may become a matter of law as it has elsewhere in the country.

The greatest danger, I feel, is the movement of hospitals into the practice of medicine. When the "How-To-Do-It" manual was written at the regional meetings, the statement was made: "In the interest of economy and efficiency, the facilities of the community hospital must be made to the vertical as well as the horizontal patient." It was further stated: "Future hospital planning should also take into consideration the question of having physicians' offices in or near the hospitals." Then, in an American Hospital Association Monograph, Series 10, pages 196 and 197, we find: "Intensive study and skilled care, all of increasingly professional levels of technical training, are thus assuming prominence in an armamentarium which ought to be at the modern physician's command. Because of this the Community Hospital is the logical focal point for all his operations."

I will leave you to draw your own conclusions as to what these statements mean.

Several members of our association have worked hard to alert the profession to what is coming. These men have been branded as "radicals," "malcontents," etc., not only by the opposition but also by some

of our own members. It may be time for us to redefine the term "radical," and to determine which side of the argument best fits the definition—the opponent or the champion of this scheme?

The medical profession has gone on record as being willing to cooperate in establishing a *voluntary* council on areawide planning, to help improve the coordination of medical services. But our recommendation and offer of assistance have been ignored to date.

Instead, we have been directed as to the establishment of these planning councils, but we have not had the opportunity of offering our counsel, nor have we been advised how these efforts may be kept *voluntary*.

I will welcome a plan to guarantee that no law or ordinance will be passed making these activities less than *voluntary*.—Harlan Thomas, M.D.

Memorial Symposium To Be Held in Tulsa

St. John's Hospital in Tulsa will host the first annual Samuel Goodman Memorial Symposium on September 18th and 19th in the hospital auditorium.

Made possible by a perpetual endowment fund established by friends and colleagues of the late Doctor Samuel Goodman, the symposium will continue Doctor Goodman's interest in medical education by providing a forum for outstanding authorities to present the latest information on topics of interest to the practicing physician.

Guest speakers for this first symposium will be Doctor Arnold P. Friedman of New York City, Doctor Adrian M. Ostfeld of the University of Illinois and Doctors Louis Jolyon West and Stewart G. Wolf, Jr., of the University of Oklahoma. Subject material for the meeting will be "headaches."

An evening program on September 18th will begin at 7:30 p.m. followed by a social hour. On Saturday morning, September 19th, the final portion of the program will open at 9:30 a.m.

St. John's Hospital Interns and Residents Alumni Association will be organized during the meeting. Doctor Goodman's keen interest in continuing education has provided the impetus for the creation of the association.

No registration fee will be charged. □

Wilkinson To Address AMA Meeting

The Sixth National Conference on the Medical Aspects of Sports will be held Sunday, November 29th, in conjunction with the AMA Clinical Convention in Miami Beach, Florida.

Many well known sports figures will speak at the day-long conference, sponsored by the AMA Committee on the Medical Aspects of Sports.

Bud Wilkinson, Norman, Oklahoma, former University of Oklahoma football coach and athletic director, and consultant to the President's Council on Physical Fitness, will be a principal evening speaker. His subject will be, "Building Values Through Athletics."

James E. Counsilman, Ph.D., Bloomington, Indiana, U.S. Olympic Swimming Coach, will give his "Reflections on the 1964 Olympics" at a luncheon session.

Tenley Albright, M.D., Boston, former Olympic skating star, will participate in a discussion of "Sports for Girls."

Other speakers include Warren R. Guild, M.D., Boston, who will speak on "The Meaning of Endurance," and Robert A. Moore, M.D., Ypsilanti, Michigan, whose topic is "Mental Health Through Sports."

Also on the program will be a symposium on "The Shoulder in Sports" and discussion sections on "Sports for the Teen-Ager," "Environmental Considerations," and "Aquatic Sports."

Thomas B. Quigley, M.D., Boston, Chairman of the AMA Committee and Harvard University team physician, will preside at the conference which will be held at the Deauville Hotel. □

"Stroke Congress" Set For Chicago Next Month

The First National Congress on Strokes, designed to stimulate a wide-spectrum program of prevention and management of strokes and rehabilitation of stroke patients, has been scheduled for October 29th-31st at the Palmer House in Chicago.

Sponsoring agencies are the American Medical Association, American Heart Association, Heart Disease Control Program of the U.S. Public Health Service, and Vocational Rehabilitation Administration of the Department of Health, Education and Welfare.

In announcing the Congress, Chairman Frank H. Krusen, M.D., of Temple University School of Medicine, Philadelphia, pointed out that the once hopeless connotation of the word "stroke" can be modified by newly developed concepts and techniques in prevention, and by practices developed in the last two decades in rehabilitation.

The high prevalence of strokes, third leading cause of death in the United States, is amenable to attack, Doctor Krusen said. But to be effective, all members of the community of health services must be willing to participate.

Physicians, nurses, therapists of all disciplines, administrators, social workers, psychologists, vocational counselors, community planners and legislators, all have great responsibility in translating the vision of new attitudes and practices into action on a large scale, he added.

In a message to local medical societies, the late Norman A. Welch, M.D., president of the American Medical Association, said that the program, which will be conducted by an outstanding faculty, will constitute an intensive course on pre-stroke detection, preventive medical and surgical techniques, medical care of the acute stroke patient and

continuing convalescent care. He added:

"Because of the importance of stroke prevention, management and rehabilitation to the medical profession and to the people of this country, I want to urge each county medical society to have at least one of its members attend the Stroke Congress."

Following the opening session Thursday, the epidemiology, diagnosis and prevention of strokes will be discussed by Champ Lyons, M.D., The University of Alabama Medical Center; Jeremiah Stamler, M.D., Chicago Board of Health; Irvine H. Page, M.D., Cleveland, Ohio; Clark H. Millikan, M.D., Mayo Clinic, Rochester, Minnesota; Robert N. Baker, M.D., Veterans Administration Center, Los Angeles, and Michael E. DeBakey, M.D., Baylor University College of Medicine, Houston.

Panel sessions on the care of the early stroke patient will be held Thursday afternoon and Morris Fishbein, M.D., will speak at the Congress banquet that night.

Friday's session will include a discussion on convalescent and continuing care of the stroke patient by David Frost, M.D., Vocational Rehabilitation Administration, Washington, D.C.; Edward E. Gordon, M.D., Michael Reese Hospital, Chicago; David Gelfand, M.D., Philadelphia; Fredrick J. Kottke, M.D., University of Minnesota Medical School, and Donald R. Sparkman, M.D., Division of Vocational Rehabilitation, Olympia, Washington.

Television demonstrations and "fireside" panels will also be held Friday.

Saturday morning's session will be devoted to "Community Programs for Stroke." Speakers will include Mathew Lee, M.D., New York University Medical Center; J. Gordon Barrow, M.D., Georgia Department of Public Health; John A. Lichty, M.D., Colorado Department of Public Health; Sylvia R. Peabody, Visiting Nurse Association; and Louis deBoer, Chicago Heart Association. □

DEATH

CYRIL E. CLYMER, M.D.
1887-1964

A pioneer Oklahoma City physician, Cyril E. Clymer, M.D., died August 2nd, 1964.

A native of New Burnside, Illinois, Doctor Clymer graduated from St. Louis University School of Medicine in 1910. After residing in El Reno a short time, he established his practice in Oklahoma City in 1911. In addition to his private practice, he became an instructor of surgery at the University of Oklahoma School of Medicine in 1914 and later was named head of the department.

Doctor Clymer was the father of an Oklahoma City physician, Doctor John H. Clymer. □

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Phelps Testifies Against Medicare

Malcom E. Phelps, M.D., El Reno, testified against Medicare before the Senate Finance Committee on August 14th. Representing 28,000 members of the American Academy of General Practice, the Oklahoma physician presented testimony as the key committee was considering various amendments to H.R. 11865, a House-passed measure to increase cash retirement benefits to Social Security beneficiaries.

The House of Representatives did not include a program for Social Security health care when H.R. 11865 was passed. However, when the measure reached the Senate, efforts were made by Senator Gore of Tennessee, by Senator Ribicoff of Connecticut, and by Senator Javits of New York to amend such a feature into the bill.

Following the testimony of Doctor Phelps and others, the Senate Finance Committee voted overwhelming opposition to all Medicare-type proposals.

Phelps dwelled on the point that good health or bad health are not inflexibly tied to age.

"No great and debilitating organic change takes place at three score and five years," he said. "If such a change does take place, I argue that it is imposed more by the dictates of society than by the will of God."

He spoke of the detrimental effect on people brought about by assigning them a "moment of eligibility," and warned against legislation which would compel them to "climb up on a sociologic shelf and gather someone else's dust."

In attacking the need for legislation of such magnitude, Doctor Phelps again brought out the individuality of patients, "... their health care needs and their health insurance needs vary from individual to individual and from community to community. The moment you enact legislation that provides specific

benefits for one, you will automatically neglect the needs of many. If indeed there exists any reason for a government-subsidized health care plan, then have the wisdom and vision to retain an element of flexibility, the courage and common sense to provide for those who need help and not for those who are clearly able to pay. Such a program, perhaps more often than you realize, would take from those who have not and give to those who have."

Doctor Phelps also testified against mandatory Social Security coverage for physicians, a feature contained in the House-passed version of H.R. 11865, but later stricken by the Senate Finance Committee. □

Miami Beach Plays Host To AMA Clinical Convention

A scientific program attuned to the current needs and interests of the practicing physician is planned for the 18th clinical convention of the American Medical Association.

Immunization, depression, cardiac arrhythmias, vascular occlusive diseases, emphysema, iatrogenic diseases, and hypertension are only a few of the major areas to be explored during the four-day meeting, November 29th-December 2nd.

More than 300 physicians will participate in a full program of lectures, exhibits, motion pictures, color television, fireside conferences and breakfast roundtables.

A new feature of the clinical convention this year is a postgraduate course on obstetrics for the general practitioner. Fifteen lectures will be presented during three sessions ranging from infertility and prenatal care through complications of labor and anesthesia to postnatal care and maternal mortality. Chairman of the course is Ralph W. Jack, M.D., Miami.

The entire scientific program, with the exception of the fireside conferences and breakfast roundtables, will be held in Miami Beach Convention Hall. The modern, single-level struc-

ture, completed in 1959, is fully air-conditioned and boasts one of the finest sound amplification systems to be found anywhere in the nation. It is located just one block from the Lincoln Road shopping centers, Florida's Gold Coast and the ocean.

The popular fireside conferences, presented as a joint session of the American College of Chest Physicians and the AMA, will be held Saturday night, November 29th at the Fontainebleau Hotel. There will be 11 tables at which 50 to 60 discussion leaders will engage in an informal and free exchange of views on a variety of medical subjects.

Six breakfast roundtables are scheduled at the di Lido Hotel. Topics include cancer of the thyroid, cosmetic surgery and peptic ulcer.

In addition, 125 scientific exhibits will be on display during the meeting, including a special exhibit on fractures, and some 30 medical motion pictures will be shown in the afternoons, Monday through Wednesday.

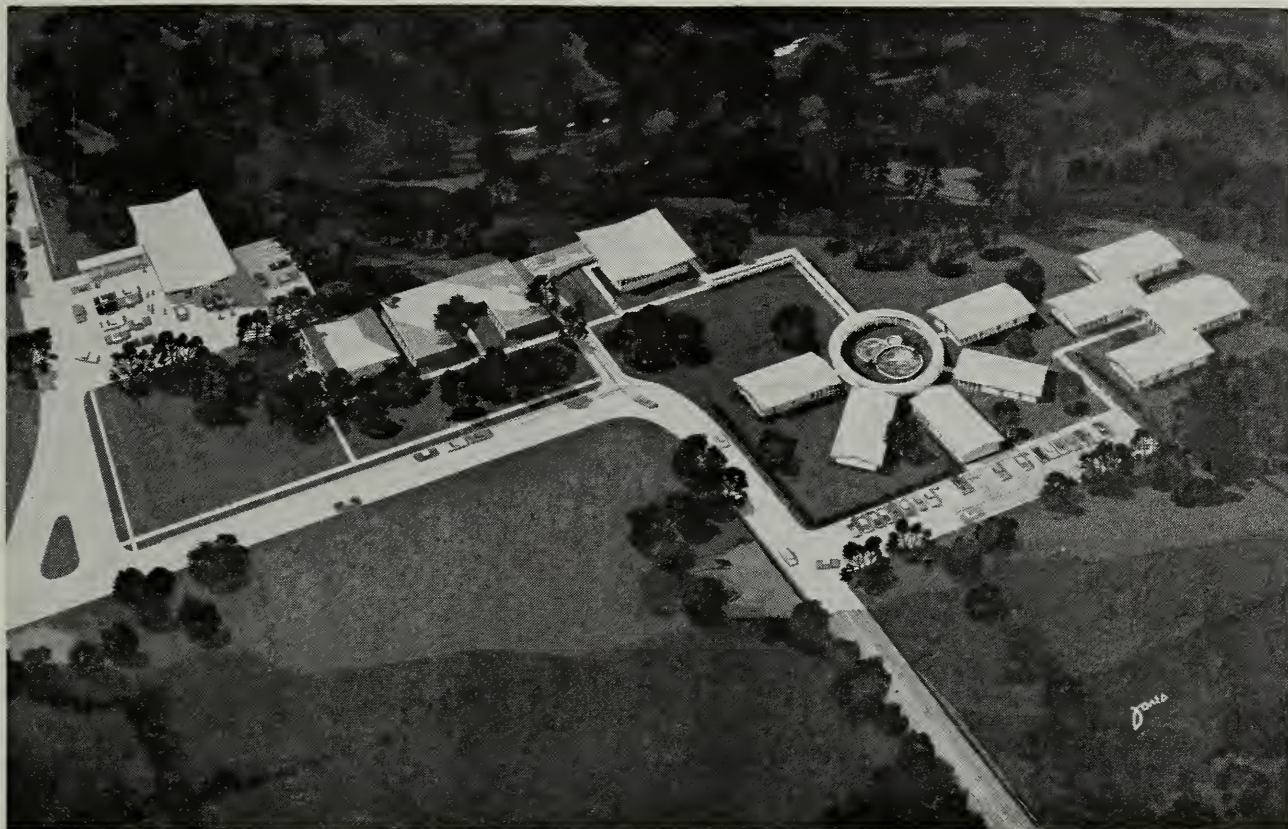
General chairmen of the local committee on arrangements are Clifford C. Snyder, M.D., and Nelson Zivitz, M.D. □

Congress on Mental Illness Scheduled

The American Medical Association's Council on Mental Health will sponsor the Second National Congress on Mental Illness and Health, November 5th-7th, in Chicago.

The meeting will provide a forum for the exchange of ideas and experiences as well as a chance to assess progress and attack problems on matters relating to mental illness and health. One aim of the Congress will be to develop positive guidelines on the role of organized medicine and the physician in private practice in various aspects of mental health.

Additional information may be obtained from the Department of Mental Health, American Medical Association, 535 North Dearborn, Chicago, Illinois. □



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Miscellaneous Advertisements

GENERAL practitioner desires to relocate. O.U. graduate, 28-years-old, would consider any size community on small investment, salary or percentage-type basis. Contact Key S, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

EXCELLENT opportunity for one or two general practitioners to buy or lease complete new office and equipment, including x-ray. Clinic located in Barnsdall, Oklahoma, with established practice of five years with far above average gross and net. Collection of 95 per cent of accounts. One other M.D. established here, age about 75, without facilities. Also, lovely two-story home just renovated for extreme comfort and beauty. Contact Ed A. Brashear, M.D., 511 West Main, Barnsdall, Oklahoma.

FOR SALE: Riding, Briggs-Stratton lawnmower with roller. Call Mrs. Peter E. Russo, VI 3-4953, Oklahoma City.

GRADUATE of the University of Nebraska School of Medicine, now completing third-year residency in dermatology, wishes location in Oklahoma. Contact Orval P. Nesselbush, M.D., 3053 South 83rd Street, Milwaukee, Wisconsin.

EXCELLENT general practice opportunity in Western Oklahoma. Partnership. Contact Key B, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

FOR RENT or lease, 4609 North Classen Blvd., Oklahoma City, 2,417 square feet, ultra-modern, ultra-spacious physician's office, including large reception room, secretarial office, two private offices, three examining rooms, laboratory, x-ray and dark room and fallout shelter; generous parking (approximately 5,000 square feet), ample air conditioning and heating. Call Mrs. Paul WI 2-7760 or Clyde H. Hale, Jr., CE 2-7128.

FOR SALE: All professional office equipment including, GE Cardioscribe, ultra-violet lamp, McKesson waterless metabolator, ophthalmoscope, cystoscope. Many small instruments. Laboratory equipment and GE X-Ray unit with complete dark room accessories. Contact A. S. Nuckols, M.D., 211 N. Sixth, Ponca City, Oklahoma. Phone ROgers 5-4330.

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WANTED: General practitioner with family to join internist and general surgeon, fully accredited 40-bed hospital and adjoining clinic in Southwest. No investment required. Salary open. Contact Key L, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

WANTED: Physician, one of three, in the industrial department of a 14-man mixed specialty clinic. Should have two years hospital training. Salary is open and there is a partnership opportunity available. Contact Hays R. Yandell, M.D., 2020 S. Xanthus, Tulsa, Oklahoma.

OFFICE SPACE: New, modern office building, located at 4700 N.W. 23rd, Oklahoma City, available for one or two physicians in 120 days. Across street from major shopping center, ample off street parking. Contact Earl F. Malherbe, Jr., 4210 N.W. 39th, WI 3-3342.

OPENING for board certified or eligible surgeon, and ophthalmologist in well-established medical clinic. Salary open, plus profit-sharing income. Contact Hansford Counts, 163 Herring, Elk City, Oklahoma, CA-5-1139.

IDEAL opening for young doctor in well-established medical clinic, sharing reception room and equipment with three other doctors. Wonderful location on North May Avenue, Oklahoma City. Contact Frank D. Thompson, 3115 N. Pennsylvania, Oklahoma City, JA 5-5700 or JA 4-9552.

GENERAL surgeon to take over long-established practice in Oklahoma town of 10,000 people. Laboratory and office equipment for sale or lease. Contact Key R, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

From its beginning in 1925 with a charter membership of 16 to its present membership of 390, the Woman's Auxiliary to the Oklahoma County Medical Society has reflected not only the growth of a community, but the development of an ideal and of a profession. The 1925 County Medical Society Roster listed 164 physicians—the 1964 issue names 602.

Very few written records of the earlier years have been preserved, but the Auxiliary Yearbook for 1925-26, its cover of brown parchment beautifully printed in faded gold, tells in a few pages an eloquent story of its authors' hopes for this infant organization. Its objective, as stated in the Constitution and By-Laws, is essentially the same 39 years later. Article II of the 1925 Constitution reads: "The object of this Auxiliary shall be to extend the aims of the Medical Profession through the wives of the doctors to the various Women's Organizations which look to the advancement of health and education, to assist in entertaining at all Oklahoma County Medical Society Conventions, to promote acquaintanceship among the doctors' wives and families, that closer fellowship may exist; to assist in any charitable or benevolent work as may be brought to its attention by the Oklahoma County Medical Society."

The 1964 By-Laws state simply: "The object of this organization shall be to cooperate with and extend the aims of the County Medical Society; to help educate public opinion relative to the advancement of health; to aid in securing better medical legislation and to promote fellowship among the members of the Auxiliary." Thus the basic purpose of the Auxiliary is now, as it has always been, to be of service to the community, to the County Medical Society, and to the whole medical profession.

The first officers were:

President—Mrs. Edward P. Allen

First Vice-President—Mrs. T. H. Flesher

Second Vice-President—Mrs. E. J. Harbison

Recording Secretary—Mrs. E. S. Frierson

Corresponding Secretary—Mrs. Earl D. McBride

Publicity Secretary—Mrs. W. K. West

Treasurer—Mrs. Basil A. Hayes

Parliamentarian—Mrs. A. M. Young

Their meetings were held on the fourth

Wednesday of each month, October to May, at 10 a.m., in the University Club Room of the Skirvin Hotel. The 1925-26 Yearbook lists three committees: Program, Entertainment, and Benevolent. Then, as now, most of the real accomplishments of the Auxiliary are the result of its committees' work. On this foundation was built the organization which 39 years later has 30 committees, more than half of which are devoted to "benevolence." Their activities cover a wide range—helping in the numerous and ever-changing areas of immediate community need, raising funds for medical education, recruiting high school students for health careers, assisting families of medical students, working for desirable legislation, and collecting medicines and supplies for World Medical Relief.

By 1928, three years after its founding, the Auxiliary had tripled its membership, and their meetings were held in a room at the First Presbyterian Church, where they sewed for the children at University Hospital. In 1930 the membership was more than 100, and the organization continued to grow and develop in service until in 1941 there were 206 active members, with 12 committees.

The years of World War II brought many challenges. Membership dwindled and leadership changed often as wives left to join their husbands, or turned to full-time jobs while their husbands were away. At the February, 1941, meeting the president, Mrs. F. Maxey Cooper, read an article by Edith Johnson of the *Daily Oklahoman* entitled "We Are at War—Women Must Work," and the membership very evidently responded whole-heartedly. A first-aid unit was organized under the direction of the Red Cross, each participating member taking 20 hours of instruction. They set aside every Wednesday morning to sew for the Red Cross.—To be continued in the October issue of *The Journal*.

The Twelfth Annual Cancer Seminar, sponsored by the Oklahoma Division of the American Cancer Society, will be held November 13th and 14th at Oklahoma City's Skirvin Hotel. The sessions will be adjourned at 11:15 a.m. Saturday, to avoid conflict with the Missouri-OU football game in Norman. If you plan to attend the seminar and game, obtain your football tickets early!

Rubella has reached epidemic proportions during the first half of 1964, according to figures released by the National Disease and Therapeutic Index, which is a nationwide survey of private medical practice. Visits to physicians for German measles numbered 1.8 million for six months, an increase of 500 per cent over the same period last year. The main trouble was in the East, which accounted for 36 per cent of all reported cases.

Relief is in sight for the bewitched. The OSMA staff, in reading a July 23rd copy of the newspaper *East African Standard*, learned that forty-seven African witchdoctors have formed a national association for "competent" practitioners and are seeking official registration with the government. The main objectives of the group are "to combat witchcraft and treat people who have been bewitched, and also to deal with thieves." Their activities, the group leaders say, will be "purely modern." The name of the latest edition of organized "medicine" is *African Repairs*.

In speaking of past accomplishments in the health field and pledging even greater future action, the Democratic platform included this statement: "In a nation that lacks neither compassion nor resources, the needless suffering of people who cannot afford adequate medical care is intolerable: We will continue to fight until we have succeeded in including hospital care for older Americans in the social security program, and have insured adequate assistance to those elderly people suffering from mental illness and mental retardation. We will go forward with

research into the causes and cures of disease, accidents, mental illness and mental retardation. We will further expand our health facilities, especially medical schools, hospitals and research laboratories."

The platform promised vigorous enforcement of regulatory powers of government, additional legislation and more government-sponsored consumer information.

In 1962, Americans spent 21.9 billions on health care and 21.6 billions on recreation. Of the health care dollar, doctors got 29 cents, hospitals 31 cents, medicines and appliances 25 cents, dentists 10 cents, and other health care costs amounted to 5 cents. cents.

American men lose more than 48 million dollars yearly from the pockets of their suits. This staggering amount represents almost one tenth of last year's contribution to United Funds and Community Chests all over the country. More than six million of these lost dollars turn up in taxis alone.

The public is not aware of the record of progress achieved by the Kerr-Mills program since permissive legislation was passed by Congress in 1960. Forty-two states and four jurisdictions have placed in operation health care programs designed to help the "near needy" (Medical Assistance for the Aged) and all fifty states and four jurisdictions now have in effect Old Age Assistance health care programs.

MEETINGS

- October 13-18** American Association of Medical Assistants, Sheraton-Oklahoma, Oklahoma City
- October 15-16** AMA Conference on Aging and Long-Term Care, Skirvin Hotel, Oklahoma City
- October 26, 27 and 28** Oklahoma City Clinical Society. Sheraton-Oklahoma, Oklahoma City
- October 29-31** National Stroke Congress, Palmer House, Chicago
- November 13-14** American Cancer Society, Oklahoma Division, Inc., Skirvin Hotel, Oklahoma City
- November 29-December 2** American Medical Association, Miami Beach, Florida

Senator Louis H. Ritzhaupt, M.D.

THE SEPTEMBER 18th fatal heart attack of Louis H. Ritzhaupt, M.D., brought to an end one of the most distinguished careers in the history of Oklahoma government.

After twenty-seven years as Logan County's senator, he had become Dean of the Senate and senior member of the entire Oklahoma Legislature, and had undoubtedly authored more laws than any contemporary. The Twenty-Ninth Legislature paid tribute to him in June, 1963, by passing a special resolution in his honor.

Throughout his childhood days in Kansas and Oklahoma, he dreamed of becoming a physician, an ambition he realized in 1917 when he graduated from George Washington School of Medicine, Washington, D.C. He established a general practice in Guthrie after release from World War I military duty, and soon entered public life through his election to the School Board and City Council.

He reached the State Senate in 1933, and was only defeated for re-election twice—in 1953 and in last May's primary where reapportionment pitted him against the incumbent President of the Senate. (He did not file for the Federally-ordered September 29th primary.)

Doctor Ritzhaupt loved his profession as well as his state, serving as OSMA Delegate for thirty-two years and as OSMA President in 1935-36.

During the 1963 legislative session, he completely recodified Oklahoma's Public Health laws and, despite his defeat for re-election, he continued to serve actively on the interim Legislative Council.

On the day before his death, he introduced a proposal to construct a new office building and laboratory for the State Department of Health. If the next legislature deems the proposal sound, it would appear most fitting that the structure be made a memorial to Senator Ritzhaupt. □

Doctor A. A. Hellbaum

GENERATIONS of medical students, now Doctors of Medicine, are united in sadness at the loss of Doctor Arthur A. Hellbaum.

He was one of the kindest, warmest and most helpful human beings that one could encounter in the passage through life. As a teacher, he could not see anything unworthy in a medical student. The worst student and the young man with the least promise always caught Art Hellbaum's eye, and he could find many good things to say about this student. He would encourage and help him generously. He was incapable of giving a failing grade simply because he didn't believe that any medical student was capable of doing less than adequate work. Students sensed this kindness and graciousness in his character and invariably responded with enthusiasm and warmth for the subjects he taught.

The sophomore student coming in contact with Art Hellbaum for the first time began to learn that there is grace, beauty and wonder in the medical sciences and that the grimness and sheer drudgery which plagued them through their preparatory years were now beginning to change for the better.

Practicing physicians felt a close kinship to this scientist. He had a rare talent for putting into meaningful terms the most complex or obscure scientific hypotheses. I suppose that at one time or another in his career as Professor of Physiology and Pharmacology at the University of Oklahoma School of Medicine, he was a guest speaker at every County Medical Society in Oklahoma. All who met him remembered him and regarded him as a friend. He responded in kind.

It has been interesting to note how many diverse medical disciplines regarded him as a part of their field of medicine. The Obstetricians and Gynecologists felt that he was one of them, because of his knowledge, understanding and basic scientific work in the field of ovarian hormones. The rheumatologists certainly thought he belonged to them. Dermatologists, Endocrinologists and Generalists all felt close to him. In a larger sense, however, he was a Professor in the true sense of the word. In the academic world he served his many appointments well, and medicine has truly lost a great talent.

—John A. Blaschke, M.D. □

The Challenge of Treating Infants With Heart Failure

SURGICAL therapeutic advances for congenital heart disease over the past decade have presented a major challenge to the clinician in the detection and proper evaluation of children with heart murmurs. It is now abundantly clear that the greatest future advances in congenital heart disease must, of necessity, come in the infant age group since most of the mortality occurs under one year of age. Because of the severity of underlying cardiac conditions, congestive heart failure in the infant is associated with an overall 60-75 per cent mortality. Although at present palliative or curative surgery for many such patients carries considerable risk, this risk is considerably less than that involved when pure medical management fails to control heart failure. It is important at this early stage, with major therapeutic break-throughs ahead in the next decade, to emphasize a team approach in salvaging these patients who were considered incurable a few years ago. Only with a vigorous approach for maximum medical therapy, complete cardiac diagnosis, and optimal surgical palliation or cure will this major problem in infants receive optimal medical attention. Thus, the management of most infants with heart failure involves a "team" approach by the patient's physician, the cardiology group in a medical center, and the cardiac surgeons.

Three types of cardiac disease may lead to congestive heart failure in infants:

(1) Arrhythmias with tachycardia or marked bradycardia (complete heart block): Ultimate diagnosis here rests with the electrocardiogram.

(2) Intrinsic myocardial disease: These patients demonstrate cardiomegaly by x-ray and heart murmurs usually are absent. Occasionally, such patients will have associated mitral insufficiency with an apical systolic murmur.

(3) Congenital heart disease: This is by far the most common cause of heart failure in infants. Table I lists the types of congenital heart disease largely responsible for heart failure in infants. With newer cardiac

Table I.

Cardiac Anomalies Causing Heart Failure During First Year of Life. The conditions are listed in categories denoting availability of surgical therapy in this age group.

I. Definitive Surgical Procedures Available.

- 1) Patent ductus arteriosus
- 2) Aortic stenosis
- 3) Coarctation of aorta
- 4) Pure valvular pulmonary stenosis
- 5) Cor triatriatum

II. Palliative Surgical Procedures Available.

- 1) Ventricular septal defect
- 2) Transposition of great vessels
- 3) Truncus arteriosus, types I and II
- 4) Common ventricle with left-to-right shunt
- 5) Atrio-ventricular canal

III. No Surgical Procedure Available.

- 1) Hypoplastic left heart (aortic and mitral atresia)
- 2) Selected cases of single ventricle, dextrocardia and truncus arteriosus

IV. Predicted Definitive Surgical Procedures Available During Next Decade

- 1) Ventricular septal defect
- 2) Total anomalous pulmonary venous drainage
- 3) Transposition of great vessels

catheterization techniques (e.g., selective cineangiocardiology), an accurate and complete diagnosis can be made in all these patients at any age, including the premature group. Ultimate surgical therapy rests upon accurate diagnosis and this requires a complete cardiac catheterization in practically all infants with heart failure due to congenital heart disease. Once this is obtained, there are only a few conditions that cannot be helped by palliative or curative surgery. Conditions such as transposition of the great vessels, which were incurable two to three years ago, now can be palliated in infancy to allow survival to the age of three to four years when complete physiological correction can be accomplished.

The continued surgical advances over the next decade will depend upon the patient's physician, in conjunction with the cardiologist, pursuing a vigorous approach for complete cardiac diagnosis so that optimal therapy can be recommended for infants with congestive heart failure secondary to congenital heart disease.

—Madison S. Spach, M.D., Department of Pediatrics, Duke University School of Medicine, Durham, North Carolina □



When Senator A. S. Mike Monroney voted for the Medicare Bill on September 2nd, he voted for imposing more than \$20,000,000 in new taxes on the working people of Oklahoma. Senator J. Howard Edmondson was true to his campaign

promise during his unsuccessful senatorial race. He voted against affixing a health care scheme to the Social Security Act.

Senator Edmondson's vote undoubtedly represented the vast majority of Oklahoma citizens, while Monroney's vote was apparently influenced by forces outside his electorate.

Why did Monroney change his position after previously voting against Medicare on two other occasions? Why would anyone vote for a bill so grossly unjust as to tax all working persons—regardless of their own financial problems—to provide health benefits to all persons who have reached their 65th birthdays—regardless of their financial needs?

If Senator Monroney decides to run again for public office in Oklahoma, he will have to explain his action on the Medicare issue. Not only will he have a difficult time justifying his candidacy to the health professions of this state, but in my opinion, the philosophy underlying an affirmative vote for Medicare will not be a saleable product to Oklahoma citizens from all walks of life.

Senator Kerr, shortly before his death, campaigned hard to help Senator Monroney get re-elected to the U.S. Senate. He circulated a letter to all physicians in which he reminded them of Monroney's opposition to Medicare. Now Monroney denies that he had knowledge of Kerr's letter, and states that

he has always favored the principle of health care through Social Security—that his previous votes against the bill were based on timing, not principle.

He explains that we have to get a Social Security health program on the books now because the absolute limit for O.A.S.I. tax is ten per cent of payroll. Doesn't he know that the measure he voted for called for the tax rate to reach 10.4 per cent by 1971? If you can go a little over a mythical ceiling, can't you go a little more, and a little more?

Neither Democratic nor Republican majorities in this state favor Medicare. Those who are well-informed know that most of Oklahoma's senior citizens are already protected by a program far superior in the scope of its benefits to Medicare. The Kerr-Mills plan offers medical, hospital, nursing care and other benefits to persons over-65 who truly need public assistance.

If he thinks Kerr-Mills is too restrictive, he should know that retired couples can have up to \$3,000 in annual income and up to \$15,000 in assets and still qualify. He should know that \$26,000,000 in state and federal taxes were spent in Oklahoma last year for Kerr-Mills!

As a matter of fact, Senator Monroney did know of the provisions and magnitude of Kerr-Mills, because he was so advised by doctors, dentists, lawyers, hospital administrators, insurance people, newspaper editors, businessmen, farmers and others—by Democrats and by Republicans.

He voted for Medicare because he was not satisfied with Kerr-Mills. It remains to be seen whether or not his electorate is satisfied with him.

Harlan Thomas MD

Research Aspects of Heparin

LEON FREEMAN, Ph.D.

Heparin has been known for a long time, but full knowledge of its physiological role is lacking. Investigations now underway may lead to new clinical uses.

HEPARIN WAS discovered nearly 50 years ago by Jay McLean working in Howell's Laboratory. It has been in clinical use for over 25 years, notably in the Scandinavian countries in the early years, because of the work of Eric Jorpes which culminated in the commercial production of heparin. Despite the extensive laboratory research, and long clinical use of heparin, there are many questions concerning the chemistry and physiology of heparin.

A great deal of chemical and biological investigation has been applied to heparin. It has been chemically identified as a member of a family of compounds, known as mucopolysaccharides, one of the primary components of connective tissue and ground substance. It is unique in that it is more highly sulfated than any other known natural substance and it is one of the most highly charged natural substances known. It has been found in essentially every tissue that has been carefully examined with the

possible exception of skeletal muscle. The wide distribution of heparin is one of the things that makes it particularly interesting.

Comprehensive surveys of heparin levels in human tissue have not been carried out. In my earlier investigations, heparin was found to be relatively abundant in the tissues of man. The lack of specific data does not permit making an accurate estimate of total heparin levels in normal human adults. Nevertheless, it is possible to estimate that the quantities which do exist in the human body are probably substantially greater than the average clinical dose, namely, that it is probably more than 20,000 units and may range up to 50 to 100,000 units. This would mean that when heparin is used clinically in doses between five and 20,000 units the amounts being administered are not pharmacological with respect to the amount present in the human body but are in the physiological range. However, it should be pointed out that the overwhelming bulk of the endogenous heparin present in the normal human or animal is present in the tissue, while injected heparin appears in the blood stream in quantities much greater than are normally found.

There is a great deal of speculation as to the physiological role which heparin may play. It was identified originally because of its ability to delay the clotting of shed blood. Subsequent investigations have shown that it not only will inhibit the clotting of blood or plasma in the test tube, but will do the same thing when administered parenterally

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Research and Development Division, Riker Laboratories.

in both man and animals and that the degree of inhibition of clotting is a function of the amount of heparin present. While this has been a subject of some controversy, the presence of heparin activity in the blood stream appears to be well documented at the present time. The amounts that are present are small and are rather firmly bound to proteins. It is not known, therefore, whether this plays any normal role in the homeostatic mechanisms which maintain the fluidity of the blood. It is intriguing to speculate that this may be the case. Definitive evidence for such a concept does not exist as yet.

Over 20 years ago, it was discovered that heparin administered to animals would induce the clearing of lipemic serum. Subsequently, it was found that this was due to the elucidation of an enzyme originally called clearing factor, and now more accurately referred to as lipoprotein lipase. This enzyme is apparently released into the blood stream only upon the administration of heparin *in vivo*. The addition of heparin to blood *in vitro* does not produce this effect. This enzyme can be measured and appreciable levels are obtained following the injection of heparin. The enzyme appears to act upon the triglyceride moiety of the lipoproteins of serum. Therefore, the injection of heparin will reduce the serum triglycerides. The presence of heparin in many tissues, particularly the fact that it exists in some abundance in adipose tissue and in considerable amounts in the intestine, leads to the interesting speculation that heparin may play a role in the handling of triglycerides and may be an important part of lipid transport mechanisms in mammalian systems. Those organs which have been shown to contain tissue lipoprotein lipase, such as adipose tissue and heart, contain heparin and the heparin appears to be intimately related to the enzyme. There is a substantial body of evidence to show that alimentary fats are at least, in part, cleared as a result of lipolysis systems in the vascular system or tissue. It is very likely that this is a function of lipoprotein lipase.

Adequate quantities of heparin may be an essential part of maintaining this enzyme system at a functional level. Therefore, the possibility exists that an inadequate amount of heparin can lead to deficiencies in the

clearing mechanisms and, therefore, to the accumulation of serum lipids. This suggests that diseases due to elevated serum lipids may, in part, be a reflection of a deficiency of heparin in the tissues of the individual. Much more experimental work is needed to help establish the validity of this concept but it represents a potentially useful way of looking at this problem.

Structurally, heparin, which is a polymer containing many sulfate groups, in many respects resembles the substances known as ion exchange resins. The synthetic cation exchange resins are polymers which contain sulfonic acid groups and which permit them to selectively bind cations of a variety of types. Heparin and related mucopolysaccharides have a similar character and it has been postulated by Dougherty that heparin may very well be a biological ion exchanger. The intriguing feature of this concept is that there are many important biologically active cations which are important in health and disease. In addition, to the obvious inorganic cations, such as sodium, potassium, calcium, etc., there are the interesting biogenic amines, among which are histamine, serotonin, some of the basic peptides, and catechol amines, all of which are cations that have physiological pH's. Some experimental tests have been made and would tend to support this concept.

One such experiment which serves to illustrate the apparent function that heparin may have in this system is performed as follows: substances such as 48/80 (a basic polymer) or polymyxin, when administered to animals, are known to give rise to a reaction which has been called histamine shock and which is due apparently to the rupture of its mast cells, causing the release of histamine and histamine-like substances in quantities which overwhelm the animal and will, ultimately, lead to its death. Such animals, when pre-treated with heparin, can be protected against an LD₁₀₀ dose of polymyxin. In this case, there is no apparent effect on the animal with the administration of the poly-

Leon Freeman received his Ph.D. in biochemistry from the University of Southern California in 1962. He is a member of the American Association for the Advancement of Science and the American Chemical Society.

myxin. Conversely, after the administration of polymyxin to normal animals, the shock can be completely reversed up to the moment of death by the administration of heparin intravenously. It appears that heparin is capable of blocking those toxic reactions which arise as the result of the administration of a histamine releaser.

There is substantial evidence that histamine and histamine-like substances are important mediators in allergy, inflammation and hypersensitive diseases. The initiation of an acute exacerbation of a hypersensitive disease or allergic reaction in people may involve the release of histamine or histamine-like substances which in turn triggers additional release and this chain reaction builds up leading to the acute attack. It is known from experiments in the past that the corticosteroids are able to interfere with this reaction to some extent by protecting the susceptible cells, particularly the fibroblasts of connective tissue, from attack by the histamine, therefore, interrupting the chain reaction in this manner. It is postulated that heparin acts on this system in a different manner, namely, by binding the histamine and histamine-like substances per-

mitting their engulfment by cells such as the macrophages. It also stimulates the macrophages themselves and permits the removal of these substances. This then is another way of interrupting the chain reaction and may very well be one basis for the physiological role of heparin. One may, therefore, speculate that in pathologies which involve the release of biogenic amines, the individuals who are susceptible to these diseases may be deficient in their tissue supply of heparin and other mucopolysaccharides. The administration of heparin might lead to the protection of these individuals.

While much of what I have indicated above is speculative, there is an increasing body of evidence accumulating which would tend to support these concepts as being meaningful. It is entirely possible that the ubiquitous distribution of heparin and the rather substantial quantities in all animal systems including man, reflect the important role that this substance may play in a variety of problems of maintaining the normal health and internal environment. It is to be hoped that research presently under way in many laboratories, and that to be conducted in the future, ultimately will help to clarify the true role that heparin plays. □

Riker Laboratories, Inc., Northridge, California

BLOOD BANKING CONFERENCE

The American Medical Association will sponsor a Conference on Blood and Blood Banking, December 11th-12th, 1964, at Chicago's Drake Hotel.

The conference is directed to practicing physicians, said Gunnar Gunderson, M.D., Chairman of the AMA Committee on Blood. Objective of the conference is to "motivate the medical profession to evaluate and implement blood banking requirements and to participate generally in local blood banking affairs," Doctor Gunderson said.

Louis K. Diamond, M.D., director of the Blood Grouping Laboratory, Boston, will outline the history of blood banking in the U.S. A session on "Blood Banking Concepts and Systems" will cover discussions on automation, central typing and crossmatching, medical sponsorship and supervision, and hospital programs.

Other topics are "Blood Procurement Concepts and Economics," "Blood Insurance-Assurance Plans," and "Standards, Inspection and Accreditation." In addition, the program includes presentations on serum hepatitis, blood research, and single unit transfusions.

Further information may be obtained from the Department of Environmental Health, AMA, 535 North Dearborn Street, Chicago.

A Possible New Therapeutic Approach for Salmonella Carrier

J. H. FOERTSCH, M.D., F.A.C.P.

The recent Scottish typhoid epidemic revives interest in the age old problem of Salmonella infections. Ampicillin failures were reported. Furoxone, although not efficacious in the acute illness, may prove to be an answer for the carrier state.

OVER FOUR HUNDRED members of the genus *Salmonella* have been identified. This genus is a member of the family Enterobacteriaceae, which includes *Shigella*, *Proteus*, *Escherichia* and other genera. During active disease, cultures of the various body fluids, stool, sputum, bile, spinal fluid, pus and urine permit the isolation and bacteriological identification of the particular *Salmonella* in any given case. This procedure is considerably enhanced if specimens are obtained and cultured prior to the use of antibiotic therapy. Although *Salmonella* are susceptible to most antibiotics *in vitro*, they may have been altered so as to be resistant *in vivo*. The *Salmonella* organisms are motile, gram-negative bacilli capable of fermenting dextrose, maltose, and mannite, producing a gas. They do not ferment lactose and sucrose. During infections they incite serum agglutination which makes possible serological identification, a most important asset relative to their further precise identification in any active salmonellosis.

SALMONELLA ANTIGENS

Two types of antigens capable of inducing serum agglutinins exist, the "somatic" or "O"

antigens are associated with the bacterial cell body, and the "flagellar" or "H" antigens which are induced by the flagella of the organism. The cell body of the *Salmonella* produces, in most instances, two or more "O" type antigens which, for purposes of identification have been assigned Arabic numerals. When several members of the *Salmonella* genus produce one of the same type "O" antigens, they are assigned to a sera group; a distinct serological entity, and in turn the group is characterized by a capital letter and referred to as a "sero group." A group designated by a capital letter contains many individuals, all of them, however, produce the identical type of "O" antigen and may, in addition, produce a variety of other somatic antigens. It is this characteristic of identical somatic antigen production that permits the assignment of a given strain to a specific category. The other "O" (somatic) antigens produced may be quite different within the same strain but are not used for sero group assignment. Ninety-five per cent of *Salmonella* capable of producing disease in man belong to five such alphabetical groups, designated by capital letters. These are: A, B, C, (C-1 and C-2), D and E. (E-1, E-2, and E-3).

The flagella differ chemically from the bacterial cell body and consequently produce antigens of a different chemical quality. These are serologically distinguishable from the somatic antigens and are designated by the letter "H." The "H" antigens are variable, as the chemical composition and thus the antigenic make-up of the flagella varies, and therefore the flagellar antigen exhibits different serologic reactivity at different times. This variance of serologic reactivity with respect to the flagellar antigens is known as "phase variation." However, not

all *Salmonellae* produce phase variation, and therefore, the flagellar phases are identified, or spoken of, as monophasic and diaphasic variations. Where one constant flagellar serologic reactivity is obtained and maintained, the flagellar antigen in this respect is spoken of as Phase One, meaning the monophasic stage. When the flagellar serologic reactivity varies from one serologic reaction to another, the flagellar antigen is identified as diaphasic. For purposes of classification, Phase One antigens are represented by lower case letters (a to z) and various subscript Arabic numerals attached to the letter z; when Phase Two antigens are identified, they are labeled by means of Arabic numerals, lower case letters, and various subscript Arabic numerals attached to the letter z.

Example:¹

Because of the numerous strains of known *Salmonella*, serological identification of individual *Salmonella* is beyond the capability of most hospital laboratories. However, for practical purposes, the bacterial isolation of the *Salmonella*, by means of cultures, establishes its presence as an offending organism, and then, the serological identification, as determined by fixing the sero group and flagellar antigen can be determined by state health laboratories or by the communicable disease center of the federal government.

CLINICAL MANIFESTATIONS

Human infestation with *Salmonella* organisms occurs frequently. In many instances the infections are self-limited with gastro-enteric signs occurring 12 to 48 hours after ingestion of contaminated food or drink and persist for one or two days. The

onset of these cases is heralded by nausea, vomiting and diarrhea, with accompanying abdominal cramps and a mild fever of 24 to 48 hours duration. The symptoms are aggravating, but the clinical picture is usually so mild that in many instances the causative agent is not sought and the illness is labeled as being due to virus. However, in all age groups there may occur a fulminating form of the illness accompanied by severe cholera-like diarrhea with rapid dehydration, blood in the stool, severe abdominal cramping, high fever, convulsions and even death.

Saphra² points out that *Salmonella* in man may assume four main types of clinical manifestations, namely "gastro-enteritis," a "typhoidal or septic syndrome," "focal manifestations," and a "carrier state." The gastro-enteric state is the one most frequently seen and ranges in severity from a mild, ambulant form to a slightly more severe form and progresses in grades of severity to the severe type wherein death results from dehydration, electrolyte imbalance, nervous disturbances and overwhelming toxicity.

The "typhoidal" or "septic" syndrome may appear with fever persisting from a few days to several weeks. Likewise, there may be splenic enlargement and a skin rash. In this form, however, the clinician may face a problem in differential diagnosis since the fever and clinical state of the patient resembles that of a pyrexia of unknown origin closely simulating typhoid fever. If diarrhea is present (and it may be absent), it is usually mild and of a short duration.

"Focal manifestations" of an acute inflammatory process may predominate the clinical picture. This form is usually directly or indirectly connected with the gastro-intestinal tract and may appear as an appendicitis, cholecystitis, salpingitis, or even as a localized peritonitis. Clinically, these con-

ANTIGENIC COMPOSITION OF SOME SALMONELLAE

SERO GROUP	NAME	SOMATIC ANTIGENS	GROUP SPECIFIC ANTIGEN	FLAGELLAR PHASE 1	ANTIGENS PHASE 2
A	<i>S. paratyphi A</i>	1, 2, 12	2	a	
B	<i>S. paratyphi B</i>	1, 4, 5, 12	4	b	1,2
	<i>S. typhimurium</i>	1, 4, 5, 12	4	i	1,2
C ₁	<i>S. paratyphi C</i>	6, 7	7	c	1,5
	<i>S. choleraesuis</i>	6, 7	7	c	1,5
C ₂	<i>S. newport</i>	6, 8	8	e, h	1,2
D	<i>S. typhi</i>	9, 12	9	d	—
E ₁	<i>S. anatum</i>	3, 10	3	e, h	1,6

ditions are acute and many times the diagnosis is made when a culture has been taken during the process of surgery. In some instances localized abscesses occur in portions of the body not directly related to the gastrointestinal symptoms. Involvement of the brain, skin, lungs, spleen and middle ear have been reported. Salmonella meningitis occurs infrequently, usually in infants of only a few days or weeks of age. Even with the use of antibiotics the mortality rate remains high. On rare occasions osteomyelitis, particularly involving the long bones, has been found. Occasionally urinary infections of a Salmonella origin are discovered, and in these cases, the signs of cystitis are prominent.

The "carrier state" is most often detected in healthy individuals, who may or may not have suffered from an infection with Salmonella previously. Saphra³ reported that in his series, 15.5 per cent of the cultures indicative of the Salmonella carrier state came from apparently healthy individuals. Only half of the carriers had a history of an attack of gastro-enteritis. Further, where bacteriological studies were complete the organisms isolated in the active stage of the illness were identical to those found in the carrier state. Other carrier states may be induced by individuals who have contacted patients with active salmonellosis and have contaminated themselves without producing an overt, acute form of the disease. Somehow they succeed in establishing a reservoir within their bodies and shed organisms in their excreta. Therefore they become silent carriers.

Fortunately in many intestinal Salmonella infections, the patients overcome the infection by inherent body defenses and within a few weeks clear the Salmonella organism from the stool and other body fluids. Thus, they escape the carrier state.

MacCready⁴ suggests that in the acute generalized infections of Salmonella, as well as in the acute focal and septic manifestations, antibiotics should be used judiciously. If possible, material for cultures and disc sensitivity tests should be taken before antibiotic treatment is instituted. The American Public Health Association,⁵ suggests that enteritis cases where the infection appears to be limited to the intestinal tract may not

need any antibiotic therapy. Treatment should be entirely supportive, *i.e.*, proper administration of fluids and electrolytes, analgesics for abdominal discomfort and anti-diarrheal drugs for dysentery. Chloramphenicol and tetracyclines sometimes appear to be effective, but the results are unpredictable. Chronic Salmonella carriers, capable of inducing active infection by personal contact, present a formidable fifth column. Eradication and bacterial rehabilitation of these individuals is desirable because they are a constant menace to public health. State laws often do not require stool cultures of employees in industries where personal, direct, or indirect contact of food occurs. Certainly present health laws and legislative control of food industries do not approach the safeguards provided for the dairy industry. As a consequence, the summer months throughout America are marked by increases in the morbidity and mortality rates of Salmonella induced diseases.

Until recently antibiotic therapy was usually ineffective in terminating a carrier state. Occasionally, cholecystectomy offered a possible means of eradicating the chronic carrier state in patients with gall stones. However, cholecystectomy alone, cured an average of only four out of nine carriers.⁶

Recently, the introduction of furazolidone (Furoxone®), has enhanced the physicians' armamentarium in that it now affords a relatively effective, safe bactericidal agent, which may be used to treat the active disease as well as the carrier state. We present the following case of acute salmonellosis with identification of the offending Salmonella organism, identification of the asymptomatic carrier and successful eradication of the carrier state by the use of Furoxone.*

*Brand of furazolidone was supplied through the courtesy of the Eaton Laboratories, Norwich, New York.

Since his graduation from the University of Pittsburgh School of Medicine in 1942, J. H. Foertsch, M.D., has been certified by the American Board of Internal Medicine. His practice in Chickasha, Oklahoma, is limited to his specialty.

Doctor Foertsch is a Fellow of the American College of Physicians, a member of Alpha Omega Alpha, the Oklahoma Society of Internal Medicine and a member of the Board of Trustees of Blue Shield.

To date seven proven cases of Furoxone *Salmonella* eradication have been reported. This report brings the total to eight such cases.⁷

CASE REPORT OF AN ACTIVE STATE

An 84-year-old, white male was hospitalized September 23, 1961, with diarrhea which appeared 24 hours earlier. He had almost continuous liquid stools, abdominal cramps and fever. He was known to have advanced arteriosclerotic heart disease with auricular fibrillation, generalized arteriosclerosis and cerebral arteriosclerosis. Before this illness he had episodes of acute paranoid psychotic behavior and had been a management problem on several occasions in the past.

At the time of the examination, his temperature was 102 rectally; he was dehydrated and toxic. The left eye was blind from an old corneal scar. In the mouth only a few snags of the lower central and lateral incisors remained; all other teeth were missing. The tongue was heavily coated, and the mucous membranes were dry and dull. Inspiratory rales were audible over the posterior and lateral regions of both lung fields. The heart rhythm was that of auricular fibrillation with a rate of 82/minute, no thrills were palpable and no murmurs were noted. The abdomen was slightly distended but not tender, and no masses were found. Digital rectal examination was negative although the prostate was slightly enlarged. The extremities were devoid of hair and the dorsalis pedis and posterior tibial arteries were not palpable.

Within 48 hours after admission the patient developed large, blue blotches over the legs and thighs despite fluid and electrolyte replacement. This was accompanied by a decreased systolic pressure to an 80-90 range with diastolic pressure of 60-70. The patient became restless and dehydration increased. Electrolyte studies disclosed a carbon dioxide combining power of 21.4 meq./liter, chlorides 105.1 meq./liter, potassium 3.2 meq./liter and sodium 137 meq./liter. Clinically the patient presented the picture of acute adrenocortical insufficiency and accordingly was given cortisone intravenously as well as intramuscularly. He also received supplemental glucose and normal saline intra-

venously. Within an hour his blood pressure returned to admission levels of 130/80, and the skin changes disappeared. He was then given a diet high in salt content, supplemental electrolytes subcutaneously. The cortisone therapy was continued plus symptomatic treatment of the diarrhea with Kaopectate.[®]

He continued to improve clinically with subsidence of the diarrhea and a return to normal temperature by September 26, 1961. The stool culture showed *Salmonella oranienburg*, Sero Group C, Somatic Antigens 6, 7, Flagellar Antigen Phase 1 m, t.

As the patient continued to improve no antibiotics were given and his convalescence was without further sequelae. Follow-up stool cultures failed to demonstrate a carrier state.

REPORT OF THE CARRIER STATE

The Oklahoma State Department of Health then contacted the personnel of the nursing home from which this man had been admitted to the hospital, and stool cultures were done on each of the nursing home's employees. A white female, 50 years of age, in good health was found to be a carrier and *Salmonella oranienburg* of the same type was cultured from her stool. Serum was taken from this suspected carrier and an antigen was prepared and titrated against her sera. The "O" antigen disclosed a titer of 1:640, and the "H" antigen disclosed a titer of 1:2560. Although she gave no history of a previous acute infection, the agglutination studies proved that she had experienced a *Salmonella oranienburg* infection in the past. Then with the isolation of the same *Salmonella* from both the patient and this individual, she was labeled an asymptomatic carrier and held responsible for the acute infection in the patient. Eradication was attempted first by using chloramphenicol and later tetracyclines but follow-up stool cultures continued to show *Salmonella oranienburg*.

Six months after her identification as a carrier her stool cultures remained positive so Furoxone tablets, 100 mg. every four hours were started and continued for two weeks.*

*This therapy was initiated at the suggestion of Dr. F. R. Hassler of the Oklahoma State Department of Health.

This treatment was begun January 12, 1962, and stool cultures were done February 5, 1962, February 20, 1962, and February 27, 1962. All were reported negative. It was felt that the Furoxone had eradicated an asymptomatic carrier after chloramphenicol and tetracycline had failed. To check the efficacy of the Furoxone, another stool culture was done on September 9, 1963. It was reported negative.

SUMMARY

A discussion of human Salmonella infestation with pertinent facts concerning the bacteriology has been presented. In addition, the case of an elderly gentleman with the clinical "gastro-enteric" form of Salmonella infestation is presented. His case was severe enough to precipitate an acute adrenocortical insufficiency which required

cortisone therapy, but later he overcame the infection and survived without becoming a carrier. No antibiotic therapy was used during his illness.

The carrier who was responsible for the acute illness in the elderly gentleman was identified. Attempts to eradicate the carrier state with chloramphenicol and tetracycline were unsuccessful but two weeks treatment with Furoxone, 100 mg. four times a day, cleared the stool permanently of the offending organism. ☐

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PAPILLEDEMA

Diagnosis and Differential Diagnosis

PATHOGENESIS OF PAPILLEDEMA

W. S. MUENZLER, M.D.

The diagnosis of a well developed papilledema or "choked disc" is not difficult. The purpose of this paper is to present clues for the early diagnosis of papilledema and to discuss the many conditions which may appear to be papilledema and are not.

PAPILLEDEMA is a term which denotes passive, non-inflammatory edema of the optic discs from any cause. *Choked disc* is a more specific designation which refers to papilledema due to increased intracranial pressure. The late Alfred Kestenbaum⁴ coined the term "*spurious papilledema*" to include non-inflammatory swelling of the disc due to causes other than increased intracranial pressure. The purpose of this paper is to discuss the means of recognition of papilledema and to review the numerous possibilities involved in the differential diagnosis. Certainly this should be of widespread interest inasmuch as the general practitioner, pediatrician, internist, and indeed virtually every physician may encounter this problem at sometime during his practice.

The actual mechanism involved in the production of papilledema is not known. Several factors enter into the pathogenesis. Anatomically the subarachnoid space of the brain communicates openly with the subarachnoid space around the optic nerve. Normally the tissues anterior to the lamina cribrosa (the perforated portion of the sclera through which the optic nerve passes) are subject to the intraocular pressure, which ranges from 12 to 22 mm Hg. The tissues posterior to the lamina are subject to the intracranial pressure which normally averages less than 9 mm Hg. Therefore, there is a small but definite flow from anterior to posterior, and any condition which alters this pressure gradient may cause edema of the disc. Increased intracranial pressure may reverse this ratio or conditions causing hypotony of the globe (inflammations, perforating injuries) change the ratio with the same effect.

The central retinal vein coming from the eye must traverse the subarachnoid space of the optic nerve and may be partly compressed due to an increased intracranial or intraorbital pressure. It is known that when the arterial-venous pressure changes from a normal ratio of 2:1 to 2:1.4 the disc tends to swell. The anatomic arrangement of the supporting fibers of the retina prevent its swelling as greatly as the disc, wherein the fibers are relatively loosely arranged.²

Recently, investigators in England¹ have produced papilledema in experimental an-

From the Department of Ophthalmology, University of Oklahoma Medical Center.

imals by ligating lymph channels in the neck. With this in mind, it was felt that a reflex spasm of the lymphatics in man might be relieved by sympathetic block (it had been previously demonstrated that experimental lymphatic spasm in the extremities could be relieved by lumbar sympathectomy). Therefore, a stellate ganglion block was done in six patients with papilledema from varied causes. In all cases there was objective and subjective improvement. Although temporary, the improvement could be reproduced by repeating the block.

SYMPTOMS ACCOMPANYING PAPILLEDEMA

The general symptoms of increased intracranial pressure such as headache, vomiting, etc., may or may not be present. A certain form of transient loss of vision (amblyopic attack) seems characteristic for papilledema.⁴ Vision fails for several seconds; this may occur initially only once every few days, and later as often as every few minutes. The etiology of the attack is not known, but Huber ascribes it to spasm of the central retinal or temporal lobe arteries. Amblyopic attacks may occur in other conditions, such as in spasm of the central retinal artery wherein they last for several minutes, in hemispheres where they last 15-30 minutes; and in acute glaucoma, where they may last for hours. The patient with papilledema may also complain of seeing sparks, stars, or lightning flashes.

SIGNS OF PAPILLEDEMA

We are primarily interested in the diagnosis of incipient papilledema. Most physicians who have seen a fully developed choked disc are not likely to forget its appearance. In early papilledema the important changes are in the capillaries and veins. An increased redness or hyperemia of the disc itself is an early sign, due to engorgement of the capillaries. Of course, in order to evaluate an increase in the redness of the disc we must have a good idea of the normal color of the disc which can only be gained through a study of many normal fundi. Engorgement, dilation, and tortuosity of the retinal veins is the next earliest sign. This

again requires a knowledge of the normal appearance of the retinal vessels. The ratio in caliber between veins and arteries, which is normally 3:2, may increase to 4:2 or even 5:2. Hyperemia of the disc and venous dilation may occur before blurring of the disc margins. Blurring of the margins begins inferiorly and superiorly, then involves the nasal margin and lastly the temporal border. Blurred margins alone certainly do not mean papilledema. In order to evaluate the amount of elevation present at the disc one must observe a vessel on the disc, record the lens with which it is seen clearly and next observe a vessel in the retina which is parallel to the one on the disc (parallel in order to avoid mistakes due to astigmatism). The difference in the number of diopters with which the two vessels is seen is an approximation of the elevation. Three diopters correspond to an elevation of 1 mm. Papilledema due to increased intracranial pressure generally shows an elevation of at least two diopters, often up to six and more. An elevation of two diopters or less, therefore, makes the diagnosis of choked disc doubtful. In early cases, of course, there may be no elevation. The ophthalmologist has the advantage of binocular ophthalmoscopes and can, therefore, observe the disc in three dimensions. The physiologic cup may be absent due to the swelling and a notation as to its presence and size may be of value in a subsequent evaluation. Pulsation of the retinal vein is present in a large percentage of normal persons. It is felt by some⁵ that if spontaneous pulsations are present the diagnosis of increased intracranial pressure can be excluded. However others^{3, 4} do not agree with this and cite instances of venous pulsations in the presence of definite increased intracranial pressure with brain tumor, so the sign is not as valuable as formerly believed. Hemorrhages are frequent in papilledema and may occur in the disc, cross it in a radial direction, or lie in the vicinity of the disc. Generally the hemorrhages are confined to the area surrounding the disc. Also, there

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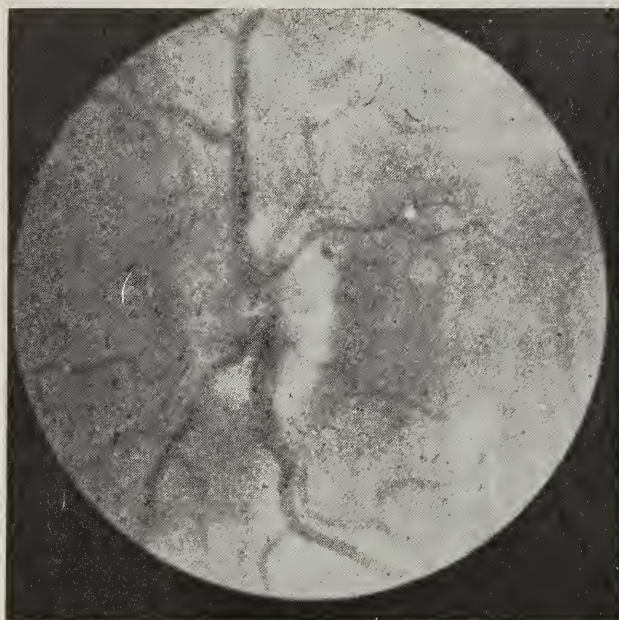


Figure 1. Papilledema, early. Note the dilated veins and blurred disc margins.

may be exudates on and around the disc and even a star-figure at the macula.

Almost every case of papilledema has an increase in the size of the blind spot and this may be present even before the disc is increased in diameter. This, of course, must be evaluated in light of the other signs present. The signs of papilledema mentioned

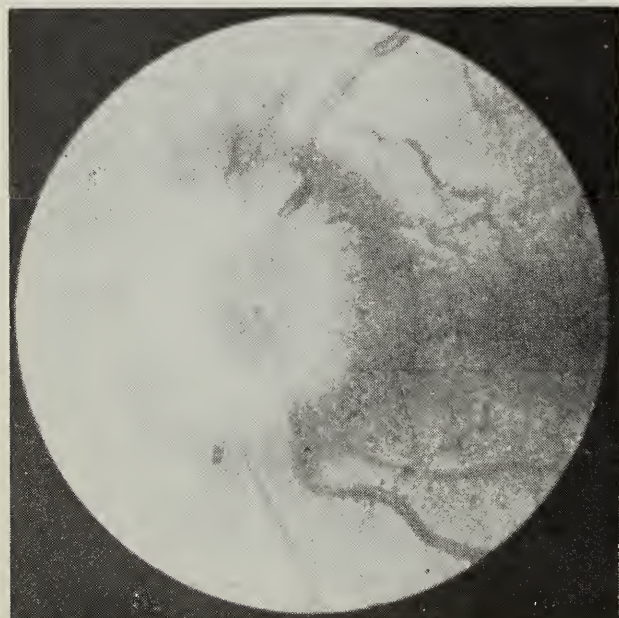


Figure 2. Papilledema, moderately pronounced. Note the dilated, tortuous veins, with deviation of the vessels as they pass over the edge of the elevated disc. Capillary congestion is seen on the disc surface. Vision normal.

above must be correlated with other clinical findings. Re-evaluation of the fundi, noting changes, is of great importance.

In a fully developed papilledema (figures 1, 2) we see an increase in diameter of disc, with blurring of the margins including nasal and temporal indistinctness and an elevation of the disc which averages between two and four diopters, although it may swell as much as eight diopters. There is a red discoloration of the disc because of capillary stasis and the veins are congested and tortuous with relatively normal arteries. The vessels appear to be deflected as they pass over the elevated margins of the disc. There may be hemorrhages within and surrounding the disc, although their presence is not consistent except in the acute stages of the appearance of papilledema. The hemorrhages generally do not extend to the periphery of the fundus. There may be white spots or "exudates" on or around the disc, which are the residua of degenerated nerve fibers. A very important fact is that there is no primary disturbance in sensory function of the eye; the visual acuity remains undisturbed until very late.

CHRONIC ATROPHIC PAPILLEDEMA

This special form of papilledema is produced by tumors in the relatively silent por-



Figure 3. Chronic atrophic papilledema. Note the marked glial proliferation and irregularity of the disc margins. The vessels appear relatively normal.

tion of the brain (cerebellum, third and fourth ventricles) which cause early internal hydrocephalus. The chronically increased intracranial pressure leads to a secondary atrophy of the discs which produces a gray-white discoloration, involving the periphery initially but gradually progressing toward the center (figure 3). This occurs after a few months of elevated pressure. Initially there is capillary and venous congestion but this gradually subsides. In contrast to the usual form of papilledema due to increased intracranial pressure, the chronic atrophic form is marked by significant disturbances in visual function. There may be an early decrease in the central visual acuity and concentric contraction of the peripheral visual field is an early sign of beginning atrophy. These patients generally seek advice because of a change in their vision and have few, if any, other complaints. These patients must be decompressed before the atrophy reaches an advanced stage, which eventually progresses to a blind patient with dilated, fixed pupils. Surgical intervention in the advanced stages may not improve function and may indeed aggravate the condition.

PAPILLEDEMA DUE TO INTRACRANIAL TUMORS

In Huber's series of 1,166 cases of brain tumor, 59 per cent of the patients had papilledema. Papilledema is present in about half of the tumors which are above the tentorium and in about 75 per cent of those below it. Slowly growing tumors cause papilledema less often than rapidly expanding tumors. The location of the tumor is not very important in the production of choked disc except in relation to the tentorium. In general, cerebellar tumors cause papilledema sooner than cerebral tumors and sphenoparietal and occipital tumors usually cause papilledema.

Papilledema is generally bilateral. The exception to this (when there is increased intracranial pressure) is the Foster Kennedy syndrome. This consists of optic atrophy without preceding papilledema on the side of the tumor (usually frontal lobe) and papilledema on the opposite side. The condition is rare. When edema of the disc is unilateral, one must consider ocular and or-

bital lesions. Of course the other eye must be observed for signs of early edema of the disc.

The fact that papilledema may be greater on one side is of no assistance in tumor localization. Frequently the tumor is on the side opposite the most elevated disc. The sudden development of an increase in the amount of papilledema may mean hemorrhage into the tumor. A unilateral or bilateral high myopia may prevent papilledema from occurring on one or both sides because of anatomic peculiarities such as a larger scleral canal.

DIFFERENTIAL DIAGNOSIS

In considering the differential diagnosis of papilledema we will refer to table 1. We have discussed the first group, due to brain tumors, which would be referred to as choked disc. This term also applies to those lesions causing an increase in the volume of brain tissue, the so called "tumor equivalent" (group II, A.). Most of the cerebral etiologies for papilledema are self explanatory and need not be discussed. The condition referred to as *pseudotumor cerebri* deserves special attention. This has been called "benign intracranial hypertension," "serous meningitis," and "papilledema due to intracranial venous obstruction." The patients have bi-

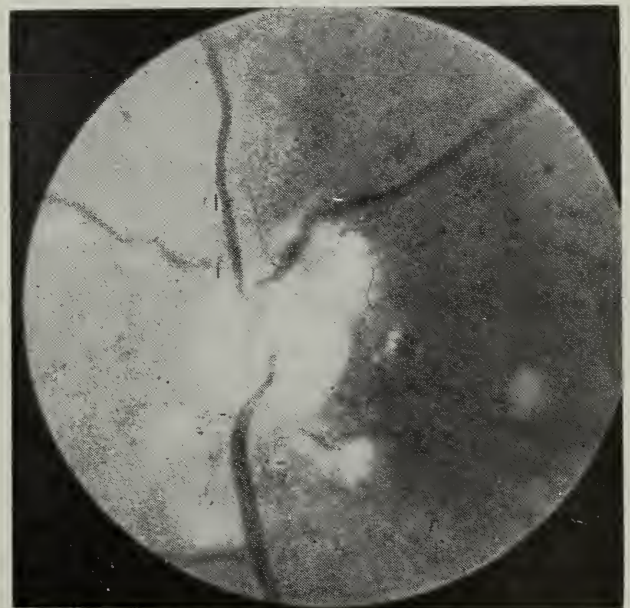


Figure 4. Hypertensive retinopathy. Note the pronounced constriction of the arterial tree, which is barely visible. There are soft, white exudates. The disc appears fairly normal.

Table I

- PAPILLEDEMA: DIFFERENTIAL DIAGNOSIS**
- I. DUE TO TRUE INTRACRANIAL NEOPLASMS (figures 1, 2, 3)
 - II. DUE TO INCREASED INTRACRANIAL PRESSURE OTHER THAN THAT CAUSED BY BRAIN TUMOR
 - A. Causing an Increase in Volume of Brain Tissue:
 1. Granulomas: tuberculosis, lues
 2. Brain abscesses
 3. Hematomas
 4. Aneurysms, rare
 5. Cysts, as Cysticercus, rare
 - B. Altering Volume or Flow of Cerebrospinal Fluid:
 1. Internal hydrocephalus
 2. Meningitis and encephalitis
 3. Thrombosis of dural sinuses
 4. Pseudotumor cerebri
 5. Spinal cord tumors: secondary hydrocephalus
 6. Herniated cervical discs
 7. Cranial deformities: synostosis, tower skull, craniofacial dysostosis
 - III. PAPILLEDEMA OF NON-CEREBRAL ORIGIN
 - A. Inflammatory:
 1. Papillitis
 2. Juxtapapillary chorioretinitis
 3. Granulomas of nerve head: tuberculosis, sarcoid
 - B. Vascular:
 1. Malignant hypertensive retinopathy (figure 4)
 2. Thrombosis of central retinal vein (figure 5)
 3. Hemorrhage into sheaths of optic nerve after skull fracture
 4. Emphysema
 5. Blood dyscrasias (figure 6)
 6. Valvular heart defects
 7. Intraorbital tumors and inflammations
 - IV. CONGENITAL ANOMALIES RESEMBLING PAPILLEDEMA
 1. Drusen of disc (figure 7)
 2. Pseudopapilledema (figure 8)
 3. Medullated nerve fibers
 4. Arteriovenous aneurysms on the disc
 5. Tumors of the disc
 6. Oblique entrance of the nerve
 - V. MISCELLANEOUS
 1. Addison's disease
 2. Hyperparathyroidism
 3. After spinal tap
 4. Guillian-Barre' disease

lateral papilledema and increased intracranial pressure but negative general physical examinations and air studies. In some of these patients, an intracranial venous thrombosis is present.

Papillitis, or optic neuritis of the disc, is an inflammatory edema of the nerve head, the etiology of which is a monograph in it-

self. Using the ophthalmoscope alone, one cannot differentiate papillitis from papilledema, because both have blurred margins, elevation, increased diameter and at times hemorrhages and exudates. Generally papillitis is unilateral, but when it is bilateral inflammation in the second eye usually occurs several weeks or months after the first. However it may be bilateral from the onset. The most important differential point is the vision, which is sharply decreased from the onset in papillitis. Examination of the visual field invariably reveals a central scotoma. Also in papillitis, because of the impaired pupillomotor stimuli, the pupil on the involved side is wider if the intact eye is occluded than the pupil on the intact eye when the involved side is covered (the Marcus-Gunn pupil). Inflammation of the choroid and retina surrounding the disc (juxtapapillary chorioretinitis) may extend into it and produce apparent papilledema; however, the inflammatory reaction is usually obvious.

Malignant, hypertensive, retinopathy (grade IV, Keith-Wagener) is one of the most important entities to be considered in the etiological diagnosis of papilledema (figure 4). The reasons for this are several: edema of the discs in this condition is nearly always bilateral and a number of systemic symptoms, such as headache, vertigo, vomit-

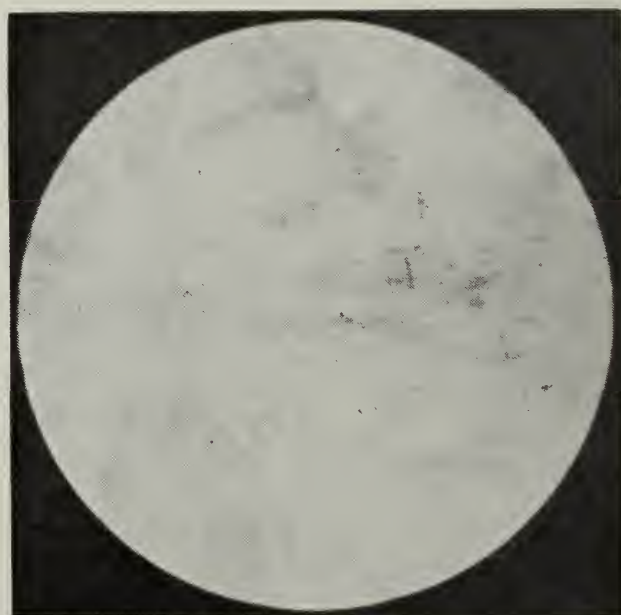


Figure 5. Central retinal vein thrombosis. Note the dilated, tortuous veins, the innumerable radial hemorrhages and the total obliteration of the disc margins. Vision is reduced to hand movements.

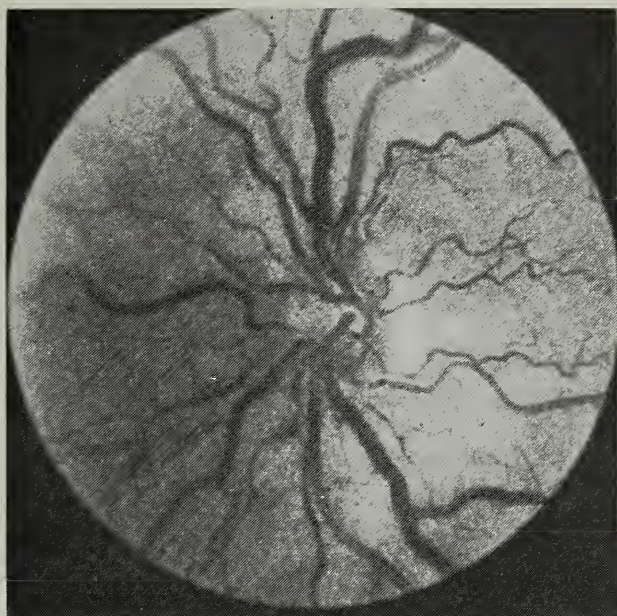


Figure 6. Polycythemia vera. The disc margins are blurred, there is moderate elevation of the disc (two diopters), the veins are very full, as well as the venules and the entire fundus is dusky in color.

ing and cerebrovascular accidents are common to both. There are vascular changes in hypertensive retinopathy which are pathognomonic, involving primarily the arteries. These consist of generalized narrowing of caliber and considerable localized irregularities or constrictions. There is an increase in the width of the light reflex from the wall of the artery and the hemorrhages occur not

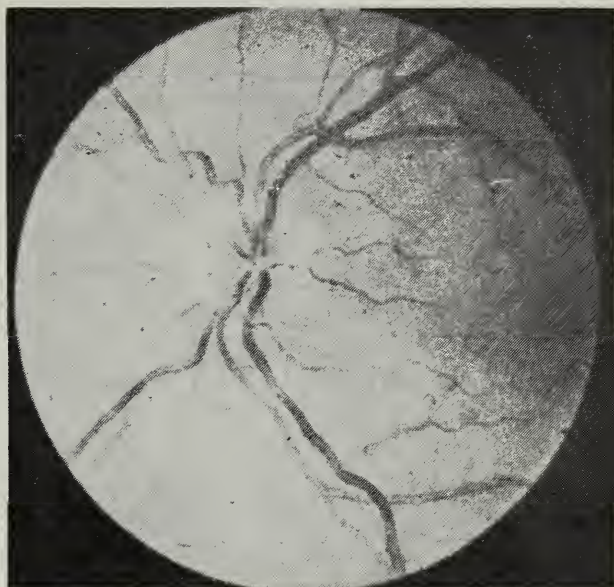


Figure 8. Pseudopapilledema. The disc is elevated two diopters and the margins are indistinct. The vessels are normal. The superior nasal vein is tortuous near the disc. Refractive error: hyperopia, eight diopters.

only in and around the disc, but also in the far periphery. There may be edema in the macular area producing a "star figure."

Central retinal vein thrombosis (figure 5) is generally unilateral. The veins are enormously dilated and tortuous. The hemorrhages have a characteristic radial arrangement and extend into the far periphery. Vision is seriously impaired from the onset.

Blood dyscrasias, including anemia from any cause, polycythemia (figure 6), leukemia, chlorosis and thrombocytopenic purpura may be associated with edema of the discs which may be bilateral.⁵

Patients with congenital anomalies of the optic discs are otherwise well; unless, of course, they have concomitant disease. *Drusen* (figure 7) of the optic discs are granular hyaline excrescences in or on the nerve head which may cause it to be irregular or appear elevated. These lesions are generally bilateral and give the nerve a glassy, yellow-white color. There may be corresponding visual field defects.

Pseudopapilledema (figure 8) or pseudoneuritis is a congenital anomaly of the nerve head consisting of an excessive glial proliferation resulting in a blurred, enlarged and at times elevated disc. Some ascribe this as merely due to the nerve passing through a

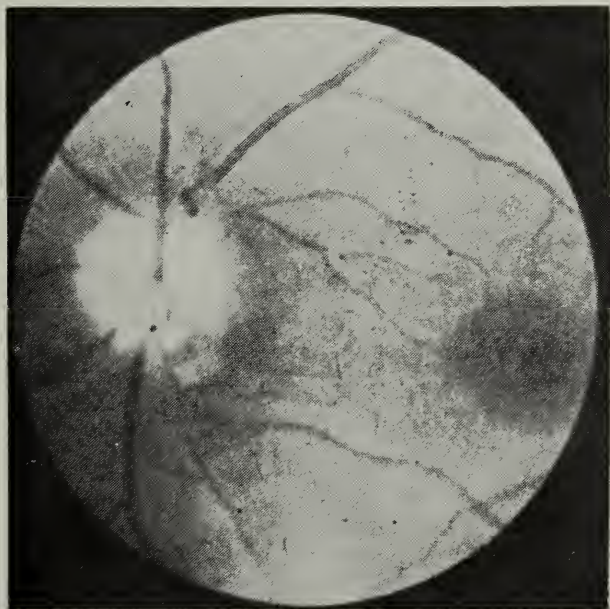


Figure 7. Drusen of the disc. Note the irregular disc margins and the nodular excrescence located inferiorly. The vessels are normal.

small scleral canal with resultant congestion. Two forms are distinguished³—one without and one with tortuosity of the retinal vessels. The disc in this condition shows a more opaque white discoloration, and appears to be rather firm and compact in contrast to the loose appearance seen in papilledema. When the vessels are tortuous, the arteries as well as the veins are involved. Pseudo-papilledema generally occurs in patients who are hyperopic, usually of a rather high degree. However, several cases have been found in myopic patients. Several members of the same family may show this condition. Hemorrhages and exudates are absent, and the blind spot is not enlarged. The diagnosis is not always easy and it must be stressed that *every case must be observed until it can be proved that there is no increase in the intracranial pressure.* The blind spots should be recorded at regular intervals, noting carefully any change.

Normally the medullary sheaths of the optic nerve fibers begin immediately behind

the lamina cribrosa. At times they extend distally to the nerve head and adjacent retina, where *medullated nerve fibers* appear as snow-white, flame-shaped bands which originate from the disc border and may make the margins seem blurred. Once seen, they are not likely to be mistaken.

SUMMARY

A review of the pathogenesis, symptoms, signs (with emphasis on early recognition), significance and differential diagnosis of papilledema is presented with the hope that this will be of help to all physicians. It is well to remember that all that swells is not papilledema.

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ABSTRACTS

ORAL CARBOHYDRATE TOLERANCE TESTS

The following questions were asked in the studies reported here. What is the response to a test meal and the response to oral glucose tolerance in the same individual? To what extent are the results of the oral glucose tolerance test affected by variations in the dose of oral glucose? How reproducible are oral glucose tolerance tests from day to day? To what extent does aging affect the oral glucose tolerance and the fasting blood glucose? The authors found that on the average the two hour glucose levels were 21 mg higher after 75 gm of oral glucose than after a breakfast containing 75 gm of carbohydrate. Changing the dose (0.8 gm and 1.6 gm per kilogram body weight) significantly affected the one and two hour level of the blood glucose. The day to day variation in same individual indicated that differences in the one and two hour blood glucose levels exceeding 20 mg per 100 ml can be expected in almost half of those instances when the glucose tolerance test was repeated. Finally, it was found that the two hour post glucose load in four different groups of old people was above 120 mg in approximately half the cases. The fasting levels in this group also showed a shift toward higher values.

Oral Carbohydrate Tolerance Tests, Kelly M. West, M.D., Johan A. Wulff, M.D., David G. Reigel, M.D.

and Dean T. Fitzgerald, M.D., *Archives of Internal Medicine*, 113: 641-648, May, 1964.

ON BONE MARROW GRAFTING IN MAN

Bone marrow grafting in man theoretically would be valuable. This tissue is most sensitive to chemotherapeutic agents. If the marrow could be protected, larger doses of these drugs could be used. Repair of damage to the marrow by radiation such as in nuclear reactor accidents represents a similar problem. Lastly, one of the present approaches to homografting of organs requires knocking out the host's immunological apparatus. This is most conveniently done with lethal or near lethal doses of radiation. Bone marrow protection in this case if provided by the donor would allow a degree of tolerance to the graft to be developed by the host. The problems represented by the above objectives consist of the mechanics of protection by bone marrow grafts and the immunological problems involved. After a discussion of these aspects of bone marrow grafting, the author concludes that until our lack of knowledge concerning bone marrow deficiencies is overcome, this procedure in man is going to progress slowly. New technical advances will need to be made before it will become feasible.

On Bone Marrow Grafting in Man, Alexander M. Woods, M.D., *Journal of the Medical Assoc. of Georgia*, 53, 1: 12-15, Jan., 1964.

Aneurysm of the Left Subclavian Artery Masquerading As A Mediastinal Mass

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Instructor in Medicine

Radiographic abnormalities in the mediastinum often present a problem in differential diagnosis as to their origin. The following case demonstrates how supra-aortic angiography defined a vascular abnormality in a patient who was thought to have a mediastinal tumor.

CASE REPORT

Mr. L. P. was a 67-year-old white male with a three-year history of hypertension, exertional dyspnea and intermittent episodes of dull, aching substernal pain which radiated into the neck and down the inner aspect of the left arm. The pain was relieved either by sublingual nitroglycerin or rest. He denied any knowledge of previous heart

disease, myocardial infarction, syphilis, orthopnea, paroxysmal nocturnal dyspnea or pedal edema.

Physical examination revealed an elderly white man whose blood pressure was 160/120 mm Hg and pulse rate 100 per minute. He was obese with arcus senilis and A-V nicking. The heart was enlarged with a grade ii/vi aortic ejection murmur at the base. Peripheral pulses were strong and synchronous. The distal pulses were sclerotic. No abdominal masses were palpable. There was no venous pulsation, hepatic tenderness or peripheral edema.

Laboratory findings revealed Hct. 47 per cent, WBC 5700/cu mm, urinalysis normal, blood urea nitrogen 15 mgs per cent, blood glucose 104 mgs per cent, and serology non-reactive. A standard electrocardiogram showed occasional ventricular extrasystoles, an old inferoseptal myocardial infarction and primary T-Wave changes.

From the Department of Medicine and the Neurocardiology Research Program of the University of Oklahoma Medical Center, Oklahoma City, Oklahoma.

Produced under the auspices of the Professional Education Committee of the Oklahoma State Heart Association.

A routine PA chest film demonstrated a density projecting to the left of the upper portion of the mediastinum over the aortic knob (figure 1). The differential included neoplasm and buckling of a normal vascular structure. Films taken one year earlier were obtained for comparison. The same lesion appeared on both examinations. To clarify the lesion further the patient underwent supra-aortic angiography. This demonstrated a dilated, tortuous ascending aorta with loss of the normal curvature of the aortic arch. In addition, a saccular lesion at the base of the left subclavian artery was seen to fill with dye. This represented an aneurysm of the left subclavian artery (figure 2). Since the lesion had not changed radiographically during a period of one year, surgical intervention was not recommended.

DISCUSSION

This case demonstrates another aspect of the various complications of atherosclerosis. In this instance the complication was asymptomatic and apparently stable. However, its location and size presented the clinician with an intriguing problem in the differential diagnosis of mediastinal masses. The initial impression was that the lesion

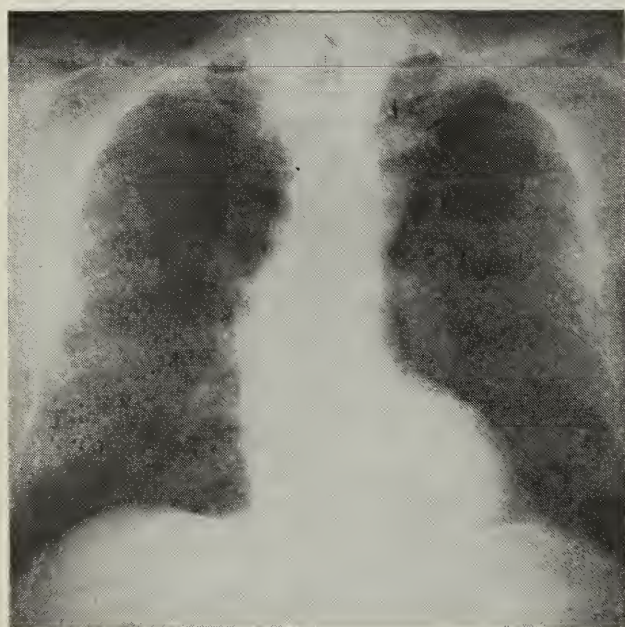


Figure 1. The arrows surround the density observed on a routine PA chest x-ray. This density is immediately adjacent to the aortic knob.

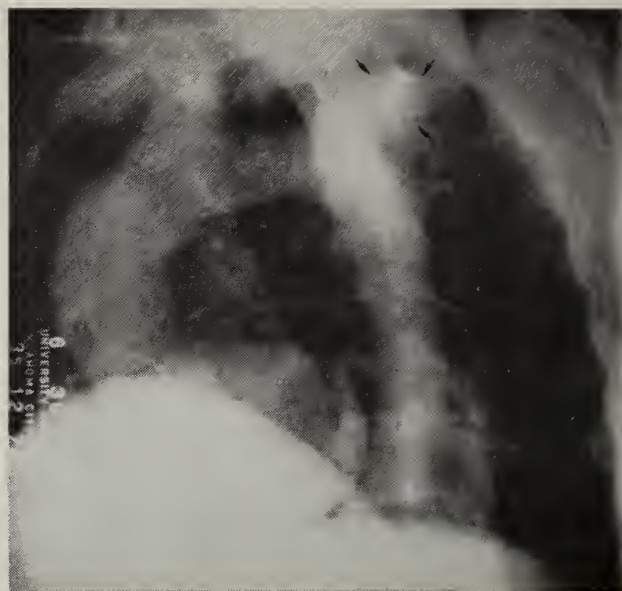


Figure 2. A left anterior oblique angiogram reveals localization of contrast media in a saccular lesion at the base of the left subclavian artery (surrounded by arrows). In addition there is marked dilatation of the ascending aorta with loss of the normal architecture of the aortic arch.

represented a neoplasm. The likelihood of this possibility lessened when old films showing the same lesion were obtained for comparison. Since the location of the density was good for a vascular lesion supra-aortic angiography was done. This revealed an aneurysm of the left subclavian artery.

An arterial aneurysm has been defined as a sac-like or sharply demarcated fusiform dilatation. Aneurysms may consist of the vessel's wall (true) or the wall may be partially or completely destroyed so that the contiguous structures form a sac-like enclosure through which blood circulates (false). They have been classified as congenital, syphilitic, arteriosclerotic, mycotic, traumatic, embolic and idiopathic.

The most likely etiology of this patient's aneurysm is arteriosclerotic. The pathogenesis is probably a rupture of the medial coats of the arteries affected by the arteriosclerotic process. This often occurs at an area of calcific deposit or plaque.

This patient should be followed periodically with routine chest x-rays. If the mass enlarges surgical intervention for removal of the aneurysm would be warranted. □

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"You Gotta Have Heart"

JENKIN LLOYD JONES

IN THE FIRST ACT of the musical comedy, "Damn Yankees," there is a song entitled, "You Gotta Have Heart."

"Heart" in our confused slang can either mean determination or compassion.

The determination of the American medical profession to develop its art and improve its techniques is almost universally admitted. So great is the awe and respect of the general public for the modern science of medicine that your one-time rivals are either fading or joining you.

The naturopaths have faded. Chiropractors seem to be treating a diminishing percentage of the population. Hostetter's Bitters, Peruna and even Hadacol are no longer in favor. And the osteopaths have now embarked on a regimen of training that seems to have no quarrel of consequence with medical theory.

In short, the people not only admire medical skills but, thanks to the enthusiastic writing of the science reporters in my profession, they often hold an exaggerated estimate of the medical art. In this respect, your public relations have been marvelous.

But where "heart" may be taken to mean compassion the public estimation of the medical profession has, in my opinion, slipped backward. The feeling that doctors, in general, are not as kindly as their predecessors, that more and more of them are intent on extracting the maximum profit from their patients is perhaps the chief reason for the pressure in favor of expanded socialized medicine. While your abilities are now almost universally conceded, your good inten-

tions are coming under increasing question.

It is toward correcting this impression, which is in large measure unfair, that I would like to direct my remarks this noon.

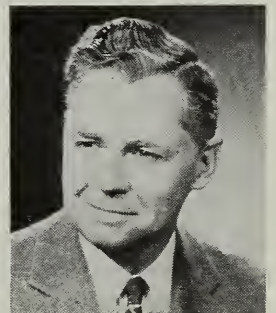
You all know the famous old painting of the family doctor sitting pensively at the bedside of the sick child. This is still the idealized image of the family doctor. But the trouble with that gentle old practitioner was that sitting was just about the best thing he could do. His bag of tricks was small. His pharmacopoeia of herbs, tinctures and elixirs was generally worthless and, at best, as crude as a mustard plaster and as violent as calomel.

Being of long experience he could, at the moment you let him in the door, smell ty-

Newspaper editor, Jenkin Lloyd Jones is a widely-known columnist whose syndicated column appears in approximately 75 newspapers with a circulation of 2,000,000.

Mr. Jones worked as a reporter, columnist, managing editor, associate editor and editor before becoming vice-president of the Tulsa Tribune. Director of the Newspaper Printing Corporation, he has traveled extensively, having been around the world twice and toured 73 countries.

He is the author of a book "The Changing World" which was published by Fleet Publishing Company this year.



Presented before the Public Relations Institute of the American Medical Association in Chicago, August 21st, 1964.

phoid fever or diphtheria. But diagnosis was not enough and comfort was not enough. Too often at the end of his long vigil he drew the sheet gently over the face of the patient. Yet people loved him.

The doctor of today has a bag of tricks fatter than Santa Claus' sack. Rarely does he sit pensively at the bedside, staring at an acute illness. He summons an ambulance. He alerts the operating room, or he orders the oxygen tent made ready or the iron lung cranked up. The plasma bottles are rigged or the artificial kidney is wheeled in. From a huge dispensary come syringes and chemicals that would have flabbergasted Paracelsus and delighted Erlich.

The modern doctor is not a bed-sitter. He is a whirlwind of action. He makes things happen—or, better yet, he makes things not happen. For his vaccines and anti-toxins have blotted up the old scourges. The pest houses have vanished. The recurrent malarial ague which our forefathers considered almost as natural as puberty is largely memory. He is doing, in general, a magnificent job, as the actuarial tables of any life insurance company will testify.

Yet, often he is not loved. Why?

First, it seems to me, he is overworked. He is overworked, primarily, because the appetite for medical services has never been so great. Secondly, the ratio of M.D.'s to the total population is going down. I don't know what's wrong with the younger generation, considering the material rewards possible in medicine. But early marriage is the current mode, and in an age where millions of youth are behaving as though they expected the cobalt bombs to drop tomorrow it is understandable that eight to ten years of preparation for an increasingly demanding profession would not be popular.

Because the doctor is overworked he tries to use his time to the best advantage. The house call, generally, is an inefficient method of practicing modern medicine. In the first place, it is impossible for the doctor to put his best tools in a black bag, or even in his car trunk. Secondly, the night house call cuts into the doctor's generally inadequate rest and injures his efficiency the next day.

Furthermore, many house calls are unnecessary. If a man leaped into his clothes and roared out of the driveway every time a panicky young mother had a croupy baby he'd be leaping and roaring most nights of the year. So the doctor argues sincerely and with considerable logic that the patient should come to the office.

The only trouble is that wherever a real emergency fails to get a response the scars go deep. The husband of an elderly woman friend of mine developed coronary symptoms at 5 a.m. The sleepy physician suggested over the phone that the patient be given a sedative and show up at the office before noon. Half an hour later the frantic wife held a dead man in her arms. Although her political philosophy is to the right of Benjamin Harrison she is now "gung ho" for socialized medicine. Not that she would get any better service, but she thinks this would punish doctors.

I believe that in every community above 20,000 population the local medical society should designate physicians on a rotating schedule to handle those night calls which, although they may not be urgent, the caller thinks are urgent. In larger communities such a chore could be handled by young interns and residents.

For if medicine is to maintain its humanitarian image it must be prepared, like the fire department, to respond in some way to all alarms, even false ones. In many communities, when the time is inconvenient the medical response is too weak.

Secondly, the medical profession must be more vigilant than it has been in curbing its own racketeers. It has done pretty well in curbing the utter quacks. The state examinations are generally adequate and the requirements for fellowships are usually stiff. But a bloodsucker is a bloodsucker, even if he is also a competent journeyman.

Doctors generally know who the overchargers are in their own communities. They know the guys who sock struggling young married couples on the theory that the parents will stand the gaff. They know the over-eager young surgeons who are searching for a formula for instant Cadillacs.

Most medical societies anesthetize their consciences by setting up grievance committees to which irate patients may direct their

complaints. But few patients with any pride ever complain. Mostly they pay up eventually and then spend the rest of their lives nursing resentment against the whole profession. It is the silent, but injured, patient who is more dangerous to the future of private medicine than the squawker who gets relief or the deadbeat who doesn't pay at all.

I think medical societies should insist, as a membership requirement, on the right to examine charges, taking into consideration the difficulty of the treatment, the amount of time consumed, and the wealth of the patient. And in those cases where charges run consistently out of line there should be some very tough talk, for the booblers are a menace to the whole group.

It was sad that a few years ago it was the Department of Justice, not the medical profession, that blew the whistle on ophthalmologists who were taking blatant kick-backs from eyeglass lense-grinders.

Equally sad was the testimony last week before the Senate Anti-Trust and Monopoly Committee in which the associate general council of the Association of Retail Druggists charged collusion between many doctors and the pharmacies in which they hold a financial interest. While medical societies stand silent such action by and before government bodies gives the public the impression that medicine cannot or will not protect the patient and that Big Brother in Washington is his only friend. Thus he is softened up for greater government control.

I don't have to tell this audience about the evils of the professional malpractice lawyer, about the way many good doctors are grossly penalized for an honest guess that went wrong or for an accident incident to a normally hazardous operation. Once on a transatlantic ship a distinguished professor of medicine from this city confided to me that he is so afraid of a malpractice suit that when the cry arises, "Is there a doctor in the audience?," he sits with folded hands. I'd give him "A" for caution and "F" for moral courage.

Yet, in spite of the fact that fraudulent or exaggerated malpractice actions are a hazard facing every doctor it is no particular credit to the profession the way expert defense testimony can be instantly summoned by the

M.D. who has lurched in to do emergency brain surgery with five Martinis aboard.

There is such a thing as malpractice, and medicine's general denial that it exists is no more convincing than the Federal Aviation Authority's standard claim that the dead pilot is always at fault and the Airline Pilots Association's contention that he is never at fault.

One great source of disillusionment among the American people has been the rising cost or thinning cover of health insurance plans.

Those plans that make specific cash allowances for hospital care are falling farther and farther behind actual bills, while plans like Blue Cross, which undertake to cover all of ordinary hospital expenses have increased steadily in price, and the public is beginning to scream.

Yet the principle of some form of health insurance is now well accepted. Two-thirds of America's families are signed up with one plan or another.

In spite of what appears to be enormous daily rates charged by modern hospitals it cannot be honestly said that hospitals are profiteering. Their expenses are up substantially. The cost of physical plant, equipment, nurses and common labor bear no relation to the costs of even ten years ago. And hospital care, of course, is better than ever and the patient who is discharged in four days instead of six can stand a 50 per cent increase in his hospital daily rate without suffering any greater outlay.

But I wonder if the medical profession has thrown adequate weight behind schemes for getting hospital cost down. In a city like my own which contains three major hospitals there is bitter rivalry among them and a determination by each to have the latest and finest equipment, including equipment that is used only once or twice a week. Is there any reason why certain hospitals should not be designated for the treatment of certain relatively rare ailments? You could save a lot of money in refusing to duplicate exotic gadgets.

Similarly, it seems silly to keep a convalescent patient in a room built at great expense for intensive care. Why shouldn't every hospital have a "getting-well" wing with half the nurses, no piped oxygen, no two-way communications and half the gad-

gets? The therapeutic effect upon the patient as he finds himself graduated to this halfway-house-to-home might be considerable and the savings, both in construction and patient care, should be important.

For a long time the American medical fraternity looked upon medical insurance plans with suspicion and left them in the hands of salesmen. It is my impression that the best brains in the AMA have not yet tackled the wide alternatives which might make more people happy with medical insurance under a system which still leaves the doctor a free agent.

The so-called "Major Medical" expense plans are designed to stave off bankruptcy caused by a serious, prolonged illness. In a pamphlet put out recently by the AFL-CIO it is said, "In the eyes of the physician this insurance greatly increases the patient's ability to pay and is likely to lead many physicians to charge considerably more than they would in the absence of such coverage."

Remember, of course, this is a labor union speaking which has shown itself to be generally friendly toward socialistic approaches to everything except the pricing of labor. But a large number of Americans share the suspicion that many doctors take notice of insurance benefits and then start calculating ability to pay from that point upward.

It is the fear of catastrophic illness that haunts the average American much more than a desire to cut the cost of ordinary, short term medical treatment. It would seem to me not only good humanity but good self-preservation if the medical profession studied diligently the possibility of coming up with a reasonably-priced scheme, carrying a healthy deductible, which would still preserve most of a man's estate even if he burnt out his bearings.

For let's not delude ourselves that the general public in America shares the medical profession's horror of socialized medicine. It doesn't. The enthusiasm for Medicare is real, and if it is enacted in its presently-suggested form it will create an appetite for steadily-expanding government health services.

When the British Labour Party inaugurated its National Health Service 17 years

ago many doctors on both sides of the Atlantic confidently expected it to flop quickly. They pointed to the likelihood of the overuse of hospitals, of sloppy diagnosis and sloppier treatment by doctors who couldn't get their patients in their waiting rooms, of a gradual drying up of medical students as young men would balk at studying so hard to become virtual civil servants.

Some of these predictions were correct. There is a tendency in Britain to overuse hospitalization. Many doctors are rushed, indeed. Abuse of prescriptions reached a point where the government had to impose moderate charges. The quality of medical training and the quality of medical treatment is now vastly superior in the United States. It is significant that a former British prime minister went to Boston for his operation.

But while the British grouse about the medical services as they grouse about everything, you can find almost no one who wants them repealed. For the average Briton, who previously had rarely felt he could afford a doctor, has found himself getting the best medical treatment he ever had. Socialized medicine doesn't have to be excellent medicine. It only has to be better medicine and more medicine than the citizen has been used to. And he is not only satisfied, but delighted.

A few years ago I was down in Sochi, the famous Russian health resort on the Black Sea where the shock-workers and quota-exceeding miners are sent on vacation as a reward for having extended themselves for the glory of the Soviet.

In the leading spa a woman doctor who looked like a Japanese sumo champion waddled around showing us with pride the sitz baths and tallow baths and other hoary old bits of quackery which western medicine put in the ashcan years ago. I gathered that the average training of doctors on that staff was about equivalent to that of a U.S. Navy chief corpsman.

This is not to suggest that the top Soviet medical researchers are not impressive by our standards. They certainly are. I merely point out that at the ordinary patient level Soviet medicine is pretty primitive. But so far as I was able to ascertain the workers loved it. They had undoubtedly been told

that the whirlpool tubs were a Soviet invention and that the mud packs represented the latest whisper in therapy.

This was medicine as against the no-medicine that they all remembered. It was better than anything they had ever had. And I'm sure they felt compassion for the poor, exploited American worker who must, they are told, cross the doctor's palm with gold or die untended in his hovel.

It is true that because of our general condition of prosperity a larger percentage of Americans have experienced first-class medical care than the citizens of any other nation. It is true that they would not be satisfied with a socialized medicine on the Russian level or even the English level.

But it is disturbing that last year doctors in Saskatchewan only succeeded with the greatest difficulty in modifying a state takeover. And this spring the Belgian doctors were embattled. Clearly, private medicine all over the world has a selling job to do.

The time may now have arrived when American medicine must worry, not only about public relations, but about publicity. Plain old publicity. I would suggest that every legitimate opportunity be used to demonstrate that doctors—private doctors—are seriously concerned with the public welfare. This type of publicity—propaganda, if you wish—should be brought down to the level of the county medical society and tailored to the interests of the local community.

I am aware that a specific triumph by an individual doctor is not supposed to be publicized in the local press lest he gain an unfair advantage over his colleagues. The physician who reads with interest and sympathy the achievements of a doctor in a neighboring state, as set forth in large spreads in *Time* or *Life*, will have apoplexy if a member of his own society is cited in the local newspaper for righting an upside-down stomach or removing a bullet from a heart.

Newspapermen must, of course, be wary of glory grabbers. There is danger that if the bans were relaxed we might clumsily exalt the medical exhibitionist. But medicine is the only profession I know where outstanding achievement is supposed to be kept a secret from the community in which it has occurred.

Moreover, there is much more to be done than personal publicity. The medical community, as a whole, can legitimately be given a warmer image. Simple things:

It is winter and a flu epidemic strikes. The medical society can release an article, written anonymously by a competent member, discussing the type of flu that is prevalent in the neighborhood, its probable severity, and the best means of avoiding it.

It is spring and the campers are going forth. The medical society describes a new and better water-purifying tablet and warns that in certain nearby counties Rocky Mountain spotted fever has been caused by ticks.

It is summer and everybody is picnicking. The medical society comes up with a release discussing the speed with which ptomaine bacteria can spread in warm custards and salads.

It is fall and mothers are frightened because a strange thing called mononucleosis has appeared in several schools. The medical society describes the disease and puts the danger in focus.

What is the community talking about? Is the swimming lake polluted? The medical society should examine the tests and demand corrective action. The police have complained about juvenile glue-sniffers. Is it really dangerous? The medical society says it is, and why. What can be done about this 24-hour virus, now "going around" and causing nausea and diarrhea? The medical society says "Nothing, but it won't kill you."

I do not suggest poaching into the field of the syndicated medical columnist who discusses ailments of all kinds. But I do suggest that the county medical group concern itself with helping the public come to sane conclusions about local medical problems.

Sure, that's also the job of the director of the city or county health department. But do MD's really want to train people to look to doctors supported by the government for all friendly advice and counsel?

I think there's a lot that could be done to brighten the image of private medicine in America that simply isn't being done.

In a letter to me written May 20 your communications division director, Jim Reed, commented, and I quote:

"Every now and then we are asked, 'Why is the AMA always against everything?' Ac-

tually, of course, it supports far more than it opposes. For example, since I joined the Association in 1958, it has supported 124 bills in Congress while opposing all or parts of only 32.

"But this line of questioning indicates it isn't always easy to discern between *negative* and *positive* action. To be *for* health, one must be *against* disease. Yet being against disease is *positive* action, as we see it."

Well, I agree with Jim Reed totally and I say it's time to accentuate the positive.

Let America know that the AMA is not only concerned about medical overcharges, but is prepared to initiate action against habitual abusers even where there are no specific complaints from patients. This is positive.

Let America know that the AMA is all in favor of health insurance, that it will strong-

ly react to those members who may use it as a device for hiking fees, and that it is searching for new forms of insurance that may provide essential coverages at a cheaper price. This is positive.

Finally, let the AMA talk more often to the American people—not about what the AMA wants but about what concerns the citizen and his children. Something has to be done about dusting off that old painting again, the one about the pensive doctor at the bedside of the sick child. The hurried MD who dashed through his Thursday morning calls so that he can meet the boys for lunch at the club house may well deserve his half holiday. But a painter wouldn't be able to catch him.

Your genius is conceded. Your techniques are admired. Your researches are held in awe. But these things won't save you from the smothering embrace of the Welfare State.

It is your heart you have to prove. □

CALL FOR EXHIBITS

Oklahoma physicians and health organizations are invited to submit scientific exhibits for display at the 59th Annual Meeting of the Oklahoma State Medical Association in Tulsa, May 14th-16th, 1965.

Doctor Thomas W. Taylor, Exhibits Chairman, said the convention would welcome original exhibits detailing scientific investigations or studies by physicians or hospitals. Health organizations may also submit exhibits outlining special projects or general activities which may be of interest to practicing medical doctors.

Applications for exhibit space may be obtained by writing: Exhibit Chairman, Oklahoma State Medical Association, Convention Headquarters, 104 Utica Square Medical Center, Tulsa. All applications are subject to approval by the Convention Committee.

There is no charge for exhibit space, but each exhibitor is responsible for transporting, installing and dismantling his exhibit. The exhibit area will be in Tulsa's new Civic Assembly immediately adjacent to the scientific sessions.

Exhibits are to be set up on Thursday, May 13th, and removed after 1:00 p.m. on Sunday, May 16th. Each booth will be lighted with a clamp-on floodlight and equipped with a draped counter.

MEDICARE 1964—Held on One Yard Line

In a remarkable display of legislative razzle-dazzle, the 1964 version of the Medicare Tax bill worked its way through the U.S. Senate for the first time, only to languish at the adjournment of the 88th Congress when House-Senate conferees failed to reach agreement on the measure or on any of the compromise plans offered.

The Administration's team of Medicare backers used unusual deception and circumvented well established rules to obtain an election year roll call victory for the bill in the September 2nd Senate vote. But opponents of the measure in the House of Representatives refused to yield to the straightforward thrusts of the Administration and were not caught off-balance by parliamentary pitch-outs designed to turn the Senate victory into an all-out rout of the entire U.S. Congress.

Representative Wilbur Mills (D., Ark.) may be given most of the credit for the demise of Medicare during the current season. The powerful chairman of the House Ways and Means Committee led opposition forces throughout the struggle, and resisted tremendous pressures to defeat a measure which he has long felt to be unnecessary and a threat to the solvency of the Social Security system.

Here's a brief summary of how the Medicare Tax bill progressed through the 88th Congress.

The King-Anderson Bill, H.R. 3920, was introduced early during this session of Congress but it failed to receive approval of the House Ways and Means Committee. When the House of Representatives passed the Social Security Amendments Act of

1964 last summer, the measure principally provided for a five per cent increase in retirement cash benefits and contained no mention of Medicare. Parliamentary procedure then required that the act be processed through the Senate Finance Committee before going to the floor of the Senate for a vote. During Finance Committee hearings, Senators Gore, Javits and Ribicoff attempted to add various Medicare type amendments to the bill, but all efforts were voted down by the committee.

Senator Gore refused to abide by the Finance Committee ruling and introduced his Medicare Tax amendment directly to the floor of the Senate. It passed by a vote of 49-44.

Since the House-passed bill was amended by the Senate, the measure was next referred back to the House Rules Committee. Strong efforts were made by the Administration to have the Rules Committee "instruct" the House to approve the original act as well as the Medicare Tax amendment, but a nose count of Representatives revealed that such an attempt would be voted down, so the administration permitted the direct uninstructed referral of the measure to a House-Senate Conference Committee, hoping that some compromise Medicare plan could be worked out that would be agreeable to both legislative bodies.

Representative Mills and other members of the Joint Conference group refused to compromise, and administration conferees voted to let the entire Social Security Act expire rather than taking the pay raise feature at the expense of scrapping Medicare.

Congress has now adjourned with-

out increasing Social Security retirement benefits and without passing Medicare. The issue is now expected to play a prominent role in the presidential election, and if President Johnson wins on November 3rd by an overwhelming majority, some observers expect him to call a special session of Congress for the purpose of passing Medicare. At any rate, when the 89th Congress convenes in January, Medicare will undoubtedly be at the top of legislative priorities.

OSMA Action

Throughout the last session of Congress, Oklahoma physicians and others have worked hard to prevent the passage of Medicare. Intensive letter-writing campaigns have been conducted and special delegations have been organized to travel to Washington to visit with Oklahoma Senators and Representatives. Official testimony from the OSMA was presented to the House Ways and Means Committee.

In the September 2nd Senate vote on Medicare, Senator Monroney disappointed Oklahomans by casting his vote with the Administration, while Senator Edmondson opposed it. If the question had been submitted to the House of Representatives, the majority of Oklahoma's delegation would have cast negative votes.

Medicare is not dead, but neither are the forces who favor present methods of providing health care for the American people. The recent narrow victory over Medicare should leave no doubt in anyone's mind that the future holds foreboding prospects and demands grim determination. □

OKLAHOMA'S MENTAL HEALTH SURVEY NEARING COMPLETION

In September of 1963, the Oklahoma Mental Health Planning Committee was created at the direction of Oklahoma's Governor, Henry Bellmon.

The general purpose of this committee, as it was then defined by Governor Bellmon, would be to conduct a comprehensive mental health survey of all Oklahoma in an effort to identify the existing needs in the broad spectrum of mental health and illness programs. Particular survey emphasis was to be placed on local community needs since one of the ultimate objectives of the study, through its findings, would be to recommend the strengthening of community-based mental health services.

A full-time staff headed by John D. Griffith, M.D., and Mr. Jack Boyd was hired to direct and coordinate the project study. Doctor Griffith was employed as Director of Planning and Mr. Boyd as Project Coordinator. Doctor Griffith also became the Oklahoma State Health Department's divisional director of mental health.

Funds to finance the Committee's survey study and to employ a full-time staff were made possible by a \$4.2 million appropriation, passed by the 87th U.S. Congress. The money to be used by the fifty states for determining mental health needs. Oklahoma's share of the federal pie was set at \$50,000 per year.

Governor Bellmon designated the State Health Department as the administrative agency for the program, and the staff, therefore, fell under the jurisdiction of Kirk T. Mosley, M.D., Oklahoma's Commissioner of Health.

Seventy-two Physicians Serve

Oklahoma's governor was instrumental in making appointments to the Mental Health Planning Committee. In all, the committee is comprised of around 200 members—physicians, attorneys, politicians, educators and representatives of lay

organizations. Seventy-two physicians were appointed, many of whom were assigned key leadership responsibilities in the study.

The expansive committee organization was so designed as to function under the auspices of an Executive Committee and 12 subcommittees.

The Executive Committee is charged with guiding the complete mental health study as well as to serve as liaison between staff personnel and the governor. The policy-making decisions rest with this committee.

Harlan Thomas, M.D., President of the Oklahoma State Medical Association, serves on the twelve member Executive Committee, replacing Joe L. Duer, M.D., immediate past-president of the OSMA, who represented the association in the same capacity last year. Committee Chairman is Kirk T. Mosley, M.D., and the other members are: Bruce Carter, Ph.D., President, Northeastern A & M College, Miami; Hayden H. Donahue, M.D., Superintendent, Central State Hospital, Norman; E. T. Dunlap, Ph.D., Chancellor, Board of Regents for Higher Education, Oklahoma City; Mr. Milton B. Garber, Past-President, Oklahoma Press Association, Enid; Albert Glass, M.D., Director, State Department of Mental Health, Oklahoma City; Oliver Hodge, Ph.D., State Superintendent of Public Instruction, Oklahoma City; Honorable J. D. McCarty, Speaker, Oklahoma House of Representatives, Oklahoma City; Mr. Ted Parkinson, Chairman, State Board of Affairs, Oklahoma City; Mr. Lloyd E. Rader, Director, Department of Public Welfare, Oklahoma City; and, Honorable Basil R. Wilson, State Senator, Mangum.

Of the remaining twelve subcommittees, eight are chairmanned by medical doctors. The twelve subcommittees and their chairmen are: *Aging*—John W. DeVore, M.D., Oklahoma City; *Alcoholism*—William T. Holland, M.D., Tulsa; *Adult Mentally*

Ill—Edwin Fair, M.D., Ponca City; *Emotionally Disturbed Children* — James T. Proctor, M.D., Tulsa; *Delinquency* — Ted Baumberger, Ph.D., Oklahoma City; *Financing*—Eugene Swearingen, Ph.D., Stillwater; *Legal Aspects*—Mr. Daniel G. Gibbens, University of Oklahoma, Norman; *Manpower*—James Mathis, M.D., Oklahoma City; *Mental Retardation* — Sylvia Richardson, M.D., Oklahoma City; *Professional Standards* — George H. Guthrie, M.D., Oklahoma City; *Regional Task Forces* — Joe E. Timken, Ph.D., Norman; and *Research*—Jay T. Shurley, M.D., Oklahoma City.

From the date of inception, the subcommittees have been meeting routinely. Their respective jobs have consisted of digesting information given them by the subcommittee on Regional Task Forces as well as independent studies conducted on their own. For, it has been the Regional Task Force Committee's job to take the survey to the grass roots—the local communities—and upon completion of the survey, to turn their findings over to one or more of the subcommittees directly concerned with a particular facet of mental health and illness.

Preliminary Survey Reports and Recommendations Unveiled

The subcommittees have studied all data, outlined their alternatives for improvement and, on August 10, 1964, each subcommittee presented its preliminary report to the Executive Committee.

The meeting was held in the State Capitol Building and Governor Bellmon attended and took part in the discussions. Doctor Harlan Thomas as well as other members of the Executive Committee were there.

While the reports given by the subcommittees to the Executive Committee represent their recommendations for an improved mental health planning program in Oklahoma, the reports are subject to the review and

acceptance by the entire Mental Health Planning Committee as a whole, which is scheduled to meet November 5th in Norman.

The prime objective of the November 5th meeting, aside from merely reviewing the reports, will be an attempt to arrive at the acceptance of all subcommittee reports and to condense and combine the independent reports into one document.

A digest of the subcommittee reports made to the Executive Committee is listed as follows by committee:

Task Forces—The committee presented statistics and findings which demonstrated that community based, controlled and operated mental health services are high priority needs. It was suggested that Tulsa and Oklahoma City be designated as sites for comprehensive centers, offering a full range of services and that other less populated areas plan services by groups of communities combining their efforts. Consultation, as needed, should be provided to all community groups.

Alcoholism—The committee pointed to the increasing incidence of patients with alcohol addictions entering state mental hospitals. The committee described alcoholism as a malignancy which distorts personality development, social adjustment, educational attainment and spiritual growth. It cites the application of all constructive forces within the framework of society which are necessary if solutions are to be found. State law barring the treatment of alcoholics in state hospitals should be repealed. One of the two state tuberculosis sanitariums should be converted to a chronic alcoholism treatment facility. Much research is needed and the physician is the principal key to the management of the health aspect of this problem.

Financing—The Committee on Financing points out that additional expenditures for community mental health services are economically justified. That multiple source financing, including both private and public sources, should be continued and increased. That existing ser-

vices — physicians already in the community and facilities such as hospitals, workshops, schools, health departments and voluntary agencies — should be utilized to the maximum possible extent.

Legal Aspects—The committee's report drew attention to the conflict between the law's interest in protecting the citizen's rights and the physician's interest in treating and curing the patient's condition. Special attention was given to voluntary admissions for persons under 21 years of age; detention of patient's in jails; the need for emergency medical attention prior to court commitment action; community services for patients in extramural care; separate proceedings for commitment to care and competency; and confidentiality of state hospital patient records when requested by physician.

Adult Mentally Ill—The committee recommends a system of psychiatric centers be established within areas of 100,000 population and that communities within the regions combine their resources to undertake and operate these centers. That outpatient, day hospital, night hospital and consultation and educational services be provided. Moreover, that general hospitals in a region provide inpatient care and that services be available to all, with all expected to pay a fee but, none denied services because of lack of finances.

Juvenile Delinquency — The Committee on Juvenile Delinquency makes the following recommendations: (1) The establishment of a uniform court reporting system; (2) early identification of delinquent children in the schools with accompanying methods for providing treatment or services to the potential delinquent; (3) increase the usage of vocational and technical training centers for students who indicate a pre-delinquency pattern; and (4) recodify the State Children's Code.

Problems of the Aging—The committee recommendations are: (1) That it be understood that mental illness in the aged does not find its beginning at age-65; (2) that prevention is a lifetime matter and that

people must prepare for growing old; (3) that Oklahoma communities be surveyed in depth to determine their ability to provide preventive, therapeutic and custodial care for the mentally disordered aged; and (4) determination of needs and what is best must be on the basis of the individual.

Research—The Committee on Research recommends: (1) A central Research Institute and provision for smaller unit operations in various centers and regions of the state; (2) state appropriated starter or seed funds to investigate leads and get projects started; (3) the creation of an Advisory Mental Health Research Council made up of representatives from appropriate fields of knowledge, schools and official and voluntary agencies; (4) that research levels include — epidemiological research, clinical research, basic research, operations and administrative research. The committee pointed out that Oklahoma received research grants of 9.1c per capita in 1963. This compares with 25.7c for the nation as a whole.

Manpower—Based on proposing the establishment of 16 regional mental health clinics, the Committee on Manpower listed the need for 16 psychiatrists or other physicians, 16 psychologists, 32 social workers, 16 nurses, 16 occupational therapists and 16 other therapists. In proposing two comprehensive mental health centers, one each in Tulsa and Oklahoma City, the manpower needs would require seven psychiatrists, seven psychologists, 14 social workers, 34 nurses, three occupational therapists, two physical therapists, two recreational therapists and 102 aides.

The committee estimated the state hospital needs at 100 psychiatrists, 100 psychologists, 200 social workers, 417 nurses and 1,149 aides—occupational and other therapists. The committee also reported that increased population in the state will eventually require 80 psychiatrists in private practice.

Mental Retardation — Considering the Department of Public Welfare's

study in depth of this area, the Executive Committee of the Oklahoma Mental Health Planning Committee recommended that the Committee on Mental Retardation serve as liaison between the committee as a whole and the Welfare Department's Committee. Among the recommendations were: (1) That small temporary residential units be provided; (2) day schools for trainable children living at home; (3) sheltered workshops; (4) consultation for parents; (5) nursery and related services for day care; (6) adult occupational shops, coordination with employment services and community nursing homes for the care of severely retarded bed patients. Early case finding, birth registry, special education through the schools and training for personnel were other suggestions.

Professional Standards—The committee emphasized that mental health services are and should be provided, almost exclusively, by specialized personnel. A comprehensive standards system was included in the committee's report which applied to certifying the competency of mental health personnel who would be needed to direct, staff and assist in full-time mental health work. The professional standards system applies to physicians with adequate training in psychiatry, psychologists, social workers, psychiatric nurses, the clinical trained chaplain, physical therapists, occupational therapists, rehabilitation therapists, recreational therapists; music therapists, visiting counselors, school counselors, and teacher counselors.

The report states that the number of specialized personnel who could meet the proposed standards is extremely low at this point. They therefore recommend a concentrated educational program be developed to turn out the needed number of specialized mental health personnel.

Emotionally Disturbed Children — The Committee on Emotionally Disturbed Children submitted an outline report only. They advised the Executive Committee that a comprehen-

sive report would be submitted prior to the November meeting in Norman.

Executive Committee Makes Recommendations

After reviewing the twelve subcommittee reports, the Executive Committee instructed Doctor John D. Griffith, Planning Director, as follows: (1) That the staff reduce the subcommittee reports into a single composite document for submission to the entire membership of the Oklahoma Mental Health Planning Committee; and (2) that the staff develop a separate section on overall principles for the development of a system of community based mental health services.

As a result of a motion by the Speaker of the Oklahoma House of Representatives, J. D. McCarty, which was seconded by OSMA President, Doctor Harlan Thomas, final instructions were given and comments made relative to preparing subcommittee reports for the November 5th meeting of the Oklahoma Mental Health Planning Committee. The instructions given by Speaker McCarty and Doctor Thomas were as follows:

(1) Make no recommendations that would change the responsibilities of state agencies.

Comment: "The purpose is to build up community based services, not state agencies. Community based services should be community controlled and operated. The state and federal governments should help. There are enough laws on the books now to permit us to do all we are capable of doing well."

(2) Make no recommendation that suggests any existing mental health service will have less money to operate on than it does now.

Comment: "It is neither practical nor judicious to suggest reducing state hospital budgets in order to finance research or manpower development or community health services. New services are going to require new money—some from local sources, some from federal sources.

Doubtless, some will be needed from state sources to help get things started and to sustain them. The matter of state sources is up to the people directly and through their elected representatives."

(3) The document should be concerned with community services only.

Comment: "The State Mental Health Department knows its own needs and is perfectly capable of making them known to others."

(4) The document should present a set of principles for implementing the community mental health services that are needed across the state.

Comment: "The details of implementation should be left to the communities and the state agencies now responsible under the law."

(5) The staff should work closely with the Legislative Council Committee on Mental Health and Retardation.

Comment: "This provides an orderly method for getting the plan before the Legislature." □

Diabetes Week

A year-round effort to find unknown diabetics and guide them to medical care will be highlighted by a nationwide Diabetes Week from November 15th to 21st. The drive is sponsored by the American Diabetes Association which was founded by and is composed of physicians. The association works through 50 local affiliate associations and through approximately 900 Committees on Diabetes organized within state and county medical societies.

One out of every 135 persons who visit a physician's office is an unknown diabetic. Detecting diabetes as early as possible is the responsibility of every physician and all doctors are urged to cooperate to the fullest in Diabetes Week screening.

The ADA points out that all individuals with true blood sugars between the normal and the diabetic levels should be considered suspect diabetics and should be retested at subsequent intervals. □

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Limit Sabin To Children: Surgeon General

A special advisory committee to the Surgeon General of the Public Health Service, Department of Health, Education, and Welfare, is urging renewed drives by local communities during the fall and winter to vaccinate the younger age groups against poliomyelitis.

The report was prepared by a Special Advisory Committee on Oral Poliomyelitis Vaccine and was made public September 23rd by Surgeon General Luther L. Terry.

The Committee's report said that the age groups to be immunized and the vaccine chosen for use should be determined locally. The Committee said, however, that in its view the oral vaccination of persons over 18 should "generally be recommended only in those situations in which unusual exposure to poliomyelitis might be anticipated, such as epidemics, entry into military service, and travel to other countries."

The Committee recommended strongly the immunization of infants during their first year of life and the routine immunization of all children on entering school.

Doctor Terry, in releasing the report, said that the Public Health Service was accepting the Committee's recommendations. He pointed out that the shift in emphasis away from adults toward younger age groups was forecast in a Committee report of December, 1962. The advisory committee at that time emphasized the importance of concentrating on the immunization of younger age groups and noted a "very small risk" incident to the use of the oral vaccines in persons 30 years of age and over.

The Current Committee report also recommends alteration in the sequence of administering monovalent vaccines with Type II the first to be given. The newly recommended order is Types II, I, and III.

Doctor Albert Sabin, developer of the oral vaccine and a member of

the Committee, filed a report dissenting from the Committee's recommendations and calling for the continued immunization of all age groups.

The Service is making available the full text of both reports to State Health Officers, professional organizations, and other interested agencies, Doctor Terry said.

The Committee's recommendations were based on an exhaustive analysis of 87 reported cases of "polio-like illness associated with the administration of oral vaccines" which have occurred in non-epidemic areas since December 1961.

These cases were considered by the Committee on the basis of whether or not they were "compatible with the possibility of having been induced by the vaccine."

It concluded that it is not possible to prove that any individual case was caused by the vaccines and that no laboratory tests available can provide a definitive answer. Nevertheless, the Committee said, "considering the epidemiological evidence developed with respect to the total group of 'compatible' cases, the Committee believes that at least some of these cases were caused by the vaccine."

The extent of the "risk factor," according to the report, is, for Type III only 1 case in 2.5 million doses administered; for Type I, only one in six million, and for Type II only 1 in 50 million.

With respect to the very minimal risk, Doctor Terry emphasized that there should be no apprehension whatsoever among those who have already taken the oral vaccine.

In its analysis of the 87 cases, the Committee found 57 which they considered "compatible."

The "compatible" cases, the report said, occurred largely among adults. Most were widely scattered throughout the country. The onset of illness fell between 4 and 28 days following vaccine administration.

"There was no apparent association of cases with specific lots of vaccine or vaccines produced by a particular manufacturer," the report added.

In urging a renewed effort to vaccinate those still susceptible, most of them poorly immunized children in economically depressed population groups, the Committee cited the spectacular decline of polio during recent years.

The decline has been from an annual rate of 14.6 cases per 100,000 during 1950-54 to a rate of 1.8 for 1957-61. This represents a decrease of 83 per cent.

"On the basis of reports to date, less than 150 cases of paralytic poliomyelitis may be anticipated for the entire year (of 1964)," the report added.

In commenting on this phase of the report Surgeon General Terry said:

"When you compare this year's record low with the 54,000 cases of polio reported in 1952, the triumph against polio is an historic achievement in preventive medicine. This great victory has been made possible by the work of two extraordinarily dedicated scientists—Doctor Jonas Salk and Doctor Albert Sabin—and it has come to pass through the devoted efforts of hundreds of organizations and thousands of individuals," Doctor Terry said.

The Surgeon General added: "I heartily and enthusiastically endorse the Committee's primary recommendation that every effort be made for the continuing vaccination of infants and younger age groups. Only through this means can we achieve total victory over polio." □

O.U. Lists Postgraduate Courses

Three postgraduate courses to be held in the school auditorium on selected Wednesday afternoons from 1:00 p.m. to 5:30 p.m. have been announced by the Office of Postgraduate Education of the University of Oklahoma School of Medicine.

Dates for the courses and subjects to be covered are: Ear, Nose and Throat in Office Practice, November 11th; Anemias, December 9th and Ano-Rectal Diseases and Their Management, January 13th. □

Doctor Brown Adviser On U.S. Welfare

Walter E. Brown, M.D., former OSMA president from Tulsa, was recently named to a 12-member National Advisory Council to the Public Welfare Department by Anthony J. Celebrezze, Secretary of the Department of Health, Education and Welfare. He is the only physician serving on the council.

The group is to make a two-year review of programs now requiring expenditures of \$4.5 billion yearly by federal, state and local governments. Currently nearly eight million U. S. citizens are involved. Facts assembled from this review will form the basis for a formal report and recommendations by the Council to the Secretary of HEW to be submitted not later than July 1st, 1966.

Expressing interest in Oklahoma's welfare program, Doctor Brown said, "It pleases me to receive the appointment and to have an opportunity to look into the welfare picture on a nationwide basis."

The physician has served on an advisory board to the Bureau of Family Services since 1960. He has already attended one Washington, D. C. meeting in the capacity of his new appointment, and the group is scheduled to assemble again on October 22nd-23rd. □

Therapy Of Shock Is Topic For November Symposium

Physicians are invited to attend all or a part of a two and one-half day program emphasizing therapy of bacteremic shock and hear more than twenty-five guest authorities in the field of bacteremic shock from various parts of the nation discuss their findings, theories and therapeutic efforts.

The symposium on Therapy of Shock of interest to specialists and practitioners and jointly sponsored by the Civil Aeromedical Research Institute and the University of Okla-

homa Medical Center is scheduled for November 19th-21st, 1964 at the Center for Continuing Education, Norman, Oklahoma. This program will stress therapy of shock based on laboratory experiments and the wealth of clinical experience of the guest participants.

Preceding the symposium, the twenty-five guest authorities will gather in Oklahoma City and conduct research projects according to their specific interests. This "Shock Tour" will be limited to the guest researchers on November 16th, 17th and 18th at the Civil Aeromedical Research Institute. Results of the three days laboratory work will be presented and discussed with current therapeutic measures being stressed at the Symposium on Therapy of Shock.

Nebraska and Oklahoma physicians will be interested in the Nebraska vs. Oklahoma football game November 21st.

For final program and other information write to Office of Postgraduate Education, University of Oklahoma Medical Center, 801 Northeast 13th Street, Oklahoma City, Oklahoma 73104. □

Eighteen Medical Students Receive OSMA Loans

Eighteen University of Oklahoma medical students are receiving \$9,000 in loans from the Oklahoma State Medical Association this semester.

The OSMA Financial Aid to Education Committee, headed by Joe L. Duer, M.D., Woodward, met on September 13th to consider all applications and to select the most deserving students as recipients of the \$500 loans. Earlier, Doctor Duer presented five \$500 OSMA scholarship checks to entering freshmen with the highest scholastic standings.

Since the inception of the association's Financial Aid to Education Program in 1962, \$17,400 has been processed in loans to forty-four O.U. students, including those granted for the fall term of 1964. Fifteen scho-

larships have been awarded in the aggregate amount of \$7,500, and \$955.12 still remains in the account for grants-in-aid to tide students over short-term financial emergencies.

The overall program is supported by the earmarking of \$5.00 from the annual dues of every association member, amounting to an annual deposit into the fund of some \$8,600.

Loans are repayable at the completion of the student's medical training, and simple interest at the rate of two per cent does not accrue until that time. A three-year period is allowed for repayment after the notes become due.

Efforts are now being made to convert the Financial Aid to Education Program to the status of a non-profit corporation, thereby permitting tax-deductible contributions into the fund. □

AF Reserve Needs Doctors

The Fourth Air Force Reserve has announced the establishment of reserve medical units at all Air Force bases in Oklahoma, and is asking for eighteen state doctors to command and staff the units.

Medical reservists will train with the hospitals one weekend of each month and two weeks each summer. Each unit will be capable of functioning independently of the hospital, but in most instances, reserve medical personnel will augment the Base Hospital Staff if and when ordered to active duty.

The Air Force is primarily interested in physicians who have completed their active duty obligations, and would like to retain their reserve status. However, the program is open to all doctors who can qualify for a commission, including interns.

Further information can be obtained by writing to Headquarters, Fourth Air Force Reserve Region (SUR), Randolph Air Force Base, Texas, 78148. □



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Southern Medical Association Meets In November

The 58th Annual Meeting of the Southern Medical Association will be held November 16th-19th, 1964, in Memphis, Tennessee, it was announced recently by J. Hoyle Carlock, M.D., Ardmore, Oklahoma Councilor of SMA.

An outstanding scientific program will feature general sessions; symposia on problems of the adolescent, current venereal disease problems and chemotherapy; twenty-two scientific section meetings; and, color television.

The section meetings will cover major specialties as well as general practice. Each section discussion will be anchored by an outstanding specialist in the field.

Other features of the meeting are alumni reunions, the annual dinner-dance, scientific and technical exhibits, and a golf tournament. Special entertainment has been arranged for the ladies.

Further information and a housing reservation card may be obtained from Mr. Robert F. Butts, Executive Director, Southern Medical Association, 2601 Highland Avenue, Birmingham, Alabama. □

Cancer Group Clarifies Drug Program

The Oklahoma Division of the American Cancer Society has recently issued information to clarify the policy of its drug program for the medically indigent, terminal cancer victim.

Here is the present policy:

"Certain medications are provided for patients who cannot pay for them. If other resources are not available, the Division can authorize the payment of the cost of narcotics for a cancer patient, up to \$15.00 per patient per each 30 days. This type of service is approved only where patients are without other resources. In most cases it is possible to secure welfare assistance from the appropriate county or state agency. In

MOHLER HONORED BY HEART ASSOCIATION



Photograph courtesy of The Daily Oklahoman

E. C. Mohler, M.D., (left) of Ponca City received the Oklahoma Heart Association's highest award in ceremonies at OHA's annual program meeting September 19th.

President W. D. Finney of Fort Cobb presented Doctor Mohler with the Association's Distinguished Service Medallion mounted on a walnut plaque, citing the Ponca City physician for continuing leadership.

Doctor Mohler, currently chairman of OHA's Long Range Planning committee, served as president in 1962-63,

cases requiring ACS funds for narcotics, the Unit investigates and secures the physician's approval. The request is sent to the Division office on Form S-2. The Division office then authorizes a druggist, in writing, to provide such narcotics as are prescribed by the physician, not to exceed \$15.00 per month. Authorization is issued for a period of 90 days. After this period, the case is reviewed and renewed if the need exists.

"Payment for drugs by the ACS cannot be assumed until after the Division office has authorized the

has served as chairman of the OHA Research Committee and OHA Executive Committee, and has been a State Heart Association leader since his election to the state Board of Directors in 1954.

Other physicians honored at the Heart Association ceremonies were:

L. L. Conrad, M.D., of Oklahoma City, for outstanding service in Professional Education, and Doctor Galen P. Robbins of Oklahoma City, for educational service in the field of external cardiac resuscitation. □

requests.

"The narcotics for which ACS will pay are limited to these four: Morphine, Dilaudid, Pantopon, and non-compounded Codeine."

A terminal patient is defined as one who will not respond to additional treatment, whether it be irradiation, chemotherapy or additional surgery. A medically indigent patient is one where he and the family have exhausted all their current resources because of the added burden of the illness, and where the costs involved would destroy the economic stability of the family. □

Ritzhaupt Proposes New Health Facilities

On September 17th the day before his death from a heart attack (see editorial), Senator Louis H. Ritzhaupt, M.D., submitted a proposal to the Oklahoma State Legislative Council requesting a \$2,066,200 appropriation for the purpose of improving the physical plant and equipment of the State Department of Health.

The proposal, if approved by the Legislative Council and subsequently by the 30th Oklahoma Legislature, calls for the construction of a \$1,750,000 central office building for the health department and for a \$316,200 expansion of the state laboratory facility.

Both projects will be located on the present health department property, 3400 North Eastern, Oklahoma City.

For the central office building, Senator Ritzhaupt recommended building a T-shaped structure having one wing three stories high and one wing two stories high. About 28,000 square feet of the new structure would replace the existing 47-year-old health department headquarters.

The laboratory project, which is eligible to have 50 per cent of its cost offset by federal Hill-Burton matching funds, includes the renovation of the existing 18,400 square foot structure plus new construction of 10,000 square feet.

When and if the proposal is accomplished, the department will have about 100,000 square feet of space.

In justifying the overall proposal and recommending serious study of the project, Ritzhaupt reported that the present central headquarters office was built to house elderly Union soldiers and their wives. Deficiencies listed were poor design and termite infested construction, absence of hot water, substandard toilet facilities, safety and fire hazards.

The need for improved laboratory facilities was supported in the proposal on the basis of accommodating new programs and extended services.

□



DONOVAN F. WARD, M.D.

Student AMA Banquet Slated October 16th

Members of the University of Oklahoma Chapter of the Student American Medical Association, their wives and dates, will be guests of the Oklahoma State Medical Association on October 16th when the traditional annual banquet is held in Oklahoma City's Sheraton-Oklahoma Hotel.

Featured speaker for the event is Donovan F. Ward, M.D., president of the American Medical Association from Dubuque, Iowa. Doctor Ward's topic, "AMA Contributes To America's Good Health," will accentuate the positive AMA accomplishments, both past and present, toward the betterment of public health.

The Iowa surgeon recently replaced Doctor Norman A. Welch, Boston, as AMA president. Doctor Welch died suddenly on September 3rd of a cerebral hemorrhage, and Doctor Ward, as president-elect was immediately elevated to leadership.

The banquet will begin at 8:00 p.m. in the Sheraton's Ballroom. In addition to students, the invitation list will include officers and trustees of the Oklahoma State Medical Association, the O.U. medical school dean and three associate deans, and physicians participating in the school's preceptorship program.

More than 250 persons are expected to attend.

□

DEATH

LOUIS H. RITZHAUPT, M.D.
1891-1964

Former president of the Oklahoma State Medical Association and dean of the Oklahoma State Senate, Louis H. Ritzhaupt, M.D., Guthrie surgeon, died September 18th, 1964.

Born in Kansas City, Missouri, Doctor Ritzhaupt had lived in Oklahoma 70 years. He graduated from George Washington University School of Medicine in 1917 and established his practice in Guthrie in 1918. He began his role as public servant by filling a four-year term on the Guthrie School Board and served two years as a city councilman.

Despite 27 years of service in the Senate, he maintained his medical practice in Guthrie throughout the years. For 32 years he served as a member of the House of Delegates of the OSMA and as president of the group in 1935-36.

ARTHUR A. HELLBAUM, M.D.
1904-1964

A former professor of the department of Pharmacology at the University of Oklahoma School of Medicine, Arthur A. Hellcaum, M.D., died September 4th, 1964, in Oklahoma City. Following 23 years with the O.U. Medical School, Doctor Hellbaum served with the American Cancer Society in New York City before establishing his practice in Ardmore, Oklahoma, where he was residing at the time of his death.

Born in Latah, Washington, he received a Ph.D. degree from the University of Wisconsin and his medical degree from the University of Chicago, The School of Medicine. Last June 7th, he was honored at St. Olaf College, in Minnesota, with the honorary degree of Doctor of Science.

He was a member of many medical groups including the American Society of Endocrinologists and was listed in *Who's Who in America* as well as *American Men of Science*. He served as president of the Oklahoma Rheumatism Society and on the advisory staff of the Arthritis and Rheumatism Foundation.

□



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PHYSICIANS Wanted: Eye, Ear, Nose, Throat, Orthopedist, Urologist to lease space for January 1st, 1965 occupancy in new medical building directly across street from main hospital in Yuma, Arizona. For further information contact Earnest Johnson, Wilson & Van Sant, 6122 N. 7th Street, Phoenix, Arizona. Phone 264-7561.

EXCELLENT general practice opportunity in Western Oklahoma. Partnership. Contact Key B, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

GENERAL practitioner desires to relocate. O.U. graduate, 28-years-old, would consider any size community on small investment, salary or percentage-type basis. Contact Key S, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

FOR SALE: All professional office equipment including, GE Cardioscribe, ultra-violet lamp, McKesson waterless metabolator, ophthalmoscope, cystoscope. Many small instruments. Laboratory equipment and GE X-Ray unit with complete dark room accessories. Contact A. S. Nuckols, M.D., 211 N. Sixth, Ponca City, Oklahoma. Phone ROgers 5-4330.

OFFICE SPACE: New, modern office building, located at 4700 N.W. 23rd, Oklahoma City, available for one or two physicians in 120 days. Across street from major shopping center, ample off-street parking. Contact Earl F. Malherbe, Jr., 4210 N.W. 39th, WI 3-3342.

IDEAL opening for young doctor in well-established medical clinic, sharing reception room and equipment with three other doctors. Wonderful location on North May Avenue, Oklahoma City. Contact Frank D. Thompson, 3115 N. Pennsylvania, Oklahoma City, JA 5-5700 or JA 4-9552.

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FOR SALE: Riding, Briggs-Stratton lawnmower with roller. Call Mrs. Peter E. Russo, VI 3-4953, Oklahoma City.

WANTED: Physician, one of three, in the industrial department of a 14-man mixed specialty clinic. Should have two years hospital training. Salary is open and there is a partnership opportunity available. Contact Hays R. Yandell, M.D., 2020 S. Xanthus, Tulsa, Oklahoma.

WANTED: General practitioner with family to join internist and general surgeon, fully accredited 40-bed hospital and adjoining clinic in Southwest. No investment required. Salary open. Contact Key L, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

M.D., experienced in private practice and industrial medicine would like location in private practice or clinic; college; or city, state or federal agency. Contact Key A, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

(Act of October 23, 1962: Section 4369, Title 39, United States Code)

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7. Owner, Oklahoma State Medical Association (Non-profit), 601 NW Expressway, Oklahoma City, Oklahoma; Harlan Thomas, M. D., President, Medical Arts Building, Tulsa, Oklahoma; R. R. Hannas, M. D., Vice-President, Sentinel, Oklahoma; Bob J. Rutledge, M. D., Secretary-Treasurer, 1111 North Lee, Oklahoma City, Oklahoma
8. Known Bondholders, Mortgagees, and other Security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities, none
9. Paragraphs 7 and 8 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. Names and addresses of individuals who are stockholders of a corporation which itself is a stockholder or holder of bonds, mortgages or other securities of the publishing corporation have been included in paragraphs 7 and 8 when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock or securities of the publishing corporation.
10. This item must be completed for all publications except those which do not carry advertising other than the publisher's own and which are named in sections 132.231, 132.232, and 132.233, Postal Manual (Sections 4355a, 4355b, and 4356 of Title 39, United States Code)
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I certify that the statements made by me above are correct and complete.
s/DON BLAIR

By 1942 they were active in many other areas of war work—making surgical dressings for the Red Cross, manning a War Bond booth in the Skirvin Tower Hotel for one week, participating in the Troop Transit Committee (which met trains and buses to distribute candy, cigarettes, and postcards to inductees), made many contributions of money to Red Cross drives and invested the Auxiliary's Emergency Fund in War Bonds. By April 1st, 1943, Mrs. C. P. Bondurant reported that Auxiliary members had done 32,448 hours of volunteer war work. In addition, they continued their traditional services of making layettes for local hospitals, making clothing and scrapbooks for Crippled Children's Hospital, sponsoring an Annual Public Relations Coffee, and keeping themselves and others informed about proposed medical legislation.

In 1949 the Community Service Committee (then called Social Service) elected to help the Oklahoma County Tuberculosis Association prepare their Christmas seals for mailing. This project quickly became a tradition, and each year the Auxiliary's October meeting has been designated for this purpose. The largest number of letters, 31,000, were processed in 1962 by 69 Auxiliary members. Over the years the Auxiliary has given an average of 150 hours per year to the Christmas seal program alone.

One of the most rewarding of the Auxiliary's activities began with the formation of the Medical Students' wives Advisory Committee, which maintained a furniture and clothing bank in rooms near the school, furnished machines and gave sewing lessons to interested students' wives. For several years there had been wives' clubs at the school, each class having its own organization. Among both County and State Auxiliary members there was a growing interest in these young wives, and a belief that they would benefit much more from a unified organization of their own. On September 22nd, 1955, under the leadership of Oklahoma County Auxiliary members (Mrs. James P. Luton, Mrs. George H. Garrison, Mrs. James P. Bell, and Mrs. J. R. Huggins) the first Auxiliary to the Student American Medical Association was formed, and now the move-

ment is nation-wide. The Oklahoma County Auxiliary still assists the local S.A.M.A. Auxiliary by sponsoring the furniture and clothing bank, and helping them arrange meetings and programs.

Since 1925, 12 Oklahoma County women have become State Auxiliary Presidents; many more serve in other State and National offices. As horizons expand and opportunities for service increase, the present-day Auxiliary can say gratefully, "The lot is fallen unto me in a fair ground; yea, I have a goodly heritage."

FALL CLINICAL

Because of this very special event in October we are departing from our custom of presenting the County histories, to present history in the making. The women's committee, with Mrs. Henry C. Traska as chairman, has exciting plans for making the days of October 26th, 27th and 28th pleasant and worthwhile for you, who will be attending the Clinical Meeting in Oklahoma City.

Registration will begin at 2:00 p.m. October 25th, on the mezzanine of the Oklahoma-Sheraton Hotel. Tickets to the social events will be available and coffee and rolls will be served. Monday will be left open for your own plans to see Oklahoma City. Tuesday will be filled with planned excitement. At twelve o'clock sharp, a luncheon program called "Tea House of the October Moon" will be presented in the Persian Room of the Skirvin Tower Hotel. With their flair for the unusual, Balliets will give the style show an oriental touch. Adding to the oriental feeling will be a Karate Dance Exhibition by Jack Whang, who is a teacher of the art. Door prizes, brought from the oriental pavilion at the World's Fair, will be given to the lucky winners. At 7:00 p.m. the Persian Room will be the scene of "An Enchanting Evening" for the doctors, wives and guests.

Among the attractions in Oklahoma City these days will be "Who'll Save the Plowboy" at the Mummies Theatre in the round.

Don't miss this Oriental Holiday. □

How good is Medicare? Here's an example:

An 81-year-old Ohio woman was severely ill for a two-year period. Blue Cross of North-east Ohio paid \$26,110.31 on her hospital bill, a sum believed to be the largest ever paid nationally for any one person's hospital care. If the woman had been protected by Medicare instead of Blue Cross, she would have paid a \$90 deductible and then would have received \$3,130 of federal benevolence. The remaining \$23,000 would have fallen entirely on the patient and her family.

Speaking of Social Security, the experience of France should serve as sufficient warning to the "bigger-and-better" O.A.S.I. enthusiasts in the U. S. At the present time, France is \$250 million in the red on its social security scheme, but a \$3.4 billion deficit is expected by 1970, according to a recent government survey.

Frenchmen now spend \$18 billion annually for "security," \$14.5 billion of which comes directly from the pockets of workers and employers and \$3.5 billion from less-direct government taxes. This unbelievable figure can be compared to France's entire national budget of \$18.5 billion.

But from bad to worse is the future outlook. Health insurance costs are going up, coverage is going up (30 million of France's 48 million people are now covered) and inflation has robbed purchasing power to a point that subsistence payments are inadequate.

What to do? No satisfactory answer has been found, and the problem continues to snowball.

Internal Revenue Service, the unpredictable evil omen of the working man, has manufactured another imaginative program of harassment—this time aimed at the advertising revenues of non-profit publications (including this *Journal*.) Regulations are now being drafted to permit taxing of all advertising and certain subscription revenues

of publications sponsored by tax-exempt corporations. They are saying that advertising income is "unrelated" to the purposes of the non-profit publishers, an attitude hardly supported by normal logic. If the forthcoming regulations stand the test, including Congressional efforts to outlaw the position of IRS, the American Medical Association will have about one-half of its income taxed—that produced by the publication of ten scientific publications, a tabloid newspaper and a health education magazine for the laity.

In most industrial countries, income taxes are less than 50 per cent of national revenues. In the U. S., they comprise 80 per cent.

Muskogee pioneers experimental program of coordinated home care. A home care program designed to extend hospital care into the home was inaugurated September 1st by Muskogee General Hospital, Muskogee Community Nursing Service, and Blue Cross-Blue Shield. Among the benefits to be derived if the experiment proves out are: savings in health care costs, increased availability of hospital beds for acutely ill patients, and reduction in the future need for hospital expansion. Blue Cross subscribers will be allowed benefits for "hospital care at home" from visiting nurses and physicians at no increase in dues costs.

MEETINGS

October 15-16 AMA Conference on Aging and Long-Term Care, Skirvin Hotel, Oklahoma City

October 25 OSMA Board of Trustees, Association Headquarters Building, Oklahoma City

October 26, 27 and 28 Oklahoma City Clinical Society. Sheraton-Oklahoma, Oklahoma City

October 29-31 National Stroke Congress, Palmer House, Chicago

November 13-14 American Cancer Society, Oklahoma Division, Inc., Skirvin Hotel, Oklahoma City

November 29-December 2 American Medical Association, Miami Beach, Florida

Syphilitic Heart Disease

Since 1958, there has been a shocking and increasing incidence in syphilis particularly among young people. It is probable that this has been greater than the figures indicate; and it may be assumed that many of those in the younger years have remained untreated.

If this assumption is correct, physicians in fifteen years from now should encounter more cardiovascular syphilis, a complication of untreated *acquired* syphilis appearing in some ten per cent of patients.

Though there is uncertainty about diffuse syphilitic myocarditis, gumma of the myocardium has been documented repeatedly at autopsy, more commonly in the ventricular walls and less commonly in the ventricular septum.

In cardiovascular syphilis the primary lesion is in the aortic wall representing inflammation in the media and adventitia. Replacement of the fragmented and disorganized elastic tissue of the media by fibrous tissue and progressive scarring in the adventitia accounts for the "tree bark wrinkling" of syphilitic aortitis. Though the coronary arteries remain intact, changes in the aortic media commonly decrease the diameter of the coronary ostia. Deformity of the commissures of the aortic leaflets follows disease of the media of the aortic ring; not infrequently the cusps are thickened with rolled edges.

The clinical recognition of *uncomplicated aortitis* in the two decades after infection, and even extending to a lifetime of recurrent syphilitic inflammation, resolution and scarring in the aortic wall is, for the purposes of this paper, impossible of diagnosis. The *complications of aortitis*, except possibly for narrowing of the coronary ostia, are recognized generally with a little difficulty. The incidental finding upon routine examination of the characteristic early diastolic, soft, blowing murmur heard best at the left of the

sternum at the third interspace is the earliest and quite diagnostic feature. As the incompetency of the aortic valve progresses, the murmur becomes louder and is heard at the base, along the left border of the sternum, to the apex itself and even to the anterior axillary line. Then, commonly, the peripheral signs appear—the water-hammer and capillary pulses, the low diastolic pressure often with a rising systolic pressure and the pistol-shot sound. Commonly a systolic murmur at the aortic area accompanies the ejection of blood into the dilated ascending aortic arch. The complicating, usually mid-diastolic Austin-Flint murmur may accompany the diastolic murmur of regurgitation, representing turbulence from the meeting of the free regurgitant stream of blood with that from the auricle. The usual apical systolic murmur results from hypertrophy of the left ventricle and/or its dilatation with mitral insufficiency. Angina pectoris commonly accompanies aortic incompetency because of the associated narrowing of coronary ostia and an ill-sustained intra-aortic pressure. The diagnosis of angina pectoris due to syphilis in the absence of a valvular lesion is one of clinical judgment, verified only by a favorable result from antisiphilitic treatment. The ultimate result of aortic insufficiency is left heart failure, congestive failure and death.

The diagnosis of the less common aortic saccular aneurysm is relatively simple in these days of roentgenology. The many varied possibilities of its clinical picture are clear if one will simply imagine an expanding tumor in the mediastinum potentially pressing upon the esophagus, trachea, major bronchi particularly the left, the recurrent laryngeal nerves, the vagus nerve and the sympathetic branches, the lung, the pleura, the vessels arising from the aortic arch, and the erosion of bone by a pulsating tumor adjacent to the sternum, the ribs, the clavicle, and vertebra.

Many diseases may occur during latent syphilis; history only may point to the cor-

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rect diagnosis of a murmur. A reactive serologic test does not prove an aortic murmur to be of syphilitic origin or differentiate it from one of rheumatic or other origin. Nor does a nonreactive blood prove a murmur to be nonsyphilitic or that syphilis is not present. Negative screening tests occur in some ten to 15 per cent of all having active aortic disease, even in those with postmortem diagnoses. The fluorescent antibody test may be positive (or negative) in such cases even though the routine screening tests are negative.

Little need be said about antisiphilitic treatment in the management of those with advanced cardiovascular disease. Treatment will not reconstitute a normal valve nor aortic wall. Treatment of the complications of syphilitic aortitis is one of prophylaxis rather than cure. Adequate treatment of a person who has acquired syphilis of two or three years probably controls the active process in the aortic wall, which in the decade or years hence might have led to his death. *The treatment of early syphilis is imperative!—R. H. Kampmeier, M.D., Nashville, Tennessee.* □

Continuing Education To Be Stressed at AMA Meeting

IN THE AMERICAN Medical Association's long history of fostering the continuing education of practicing physicians, the 18th clinical convention next November 29th-December 2nd in Miami Beach marks another milestone.

An excellent scientific program has been planned for the meeting. Particularly noteworthy is the postgraduate course on obstetrics, consisting of a comprehensive series of lectures by outstanding teachers.

Other sessions are devoted to timely subjects of wide interest and will be followed by question-and-answer or discussion periods. The fireside conferences and breakfast roundtables will provide further time for informal discussion.

There is today an acute awareness of the need for continuing education throughout

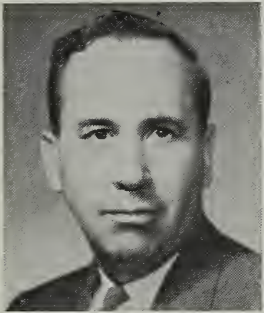
the medical profession. Much effort is currently being exerted to provide better educational opportunities for practicing physicians. Yet, learning obviously remains an individual matter which rests on the personal initiative of each physician.

Every physician, who possibly can, is urged to take advantage of the educational opportunity represented by the clinical convention. □

AMA President-Elect Succeeds President

THE SUCCESSION of the President-Elect to the office of President on the death of Norman Welch, M.D., recently brought attention to the unique provision in the AMA Constitution, Article VII, Section 5, which states, "If the President dies, resigns or is removed from office, the President-Elect shall immediately become President and shall serve for the remainder of the term of his immediate predecessor. If the time served is less than six months, he shall also serve as President until the second annual session following his election as President-Elect. If the President-Elect succeeds in the presidency six months or more before the following annual session, the House of Delegates at that following annual session shall elect another eligible person to serve as President until the next annual session."

Thus, the House of Delegates at the clinical convention in Miami Beach is charged with electing a new President-Elect to serve until June, 1965, at the time of the annual session, when he will be installed as President. The reason for this unusual provision is not clear, inasmuch as the accepted format for most organizations is to have the Vice-President succeed to the presidency in such circumstances. There is a Vice-President of the AMA, elected yearly for a one-year term, and this office now becomes increasingly obscure. The Executive Vice-President of the AMA, (Doctor Blasingame), serves for an indefinite term, at the discretion of the Board of Trustees.—*Walter E. Brown, M.D.* □



Much noise is heard these days from many quarters—even from medical doctors—that the profession must promote some new plan to help the public pay for its medical needs. Certain segments of the public are singled out as needing care they are not getting.

Of course, we deny these generalized allegations of unmet need. And because of these charges of “medical gaposis,” perhaps it is time that we define the word *need*, and try to clear up the misunderstandings and misrepresentations which have been shed on the term in its relationship to medical care.

In discussing medical care, *need* and *want* have been used interchangeably. The profession has always provided care based upon *need*—even without pay—but neither the profession nor the tax-paying public can afford to furnish all of the medical care that people may *want*. The cost would be prohibitive (as high as \$35 billion) and the quality of the product would be compromised.

We, the profession, must shoulder some of the responsibility for this problem in semantics. Patients who demand the “top” professional man are often told that he is not needed under the circumstances. On the other

hand, we may contribute to the confusion by referring to another physician the most trivial of difficulties.

Patients—and physicians—must learn that a Cadillac costs more than a Ford, even though the Ford may more than adequately fill a given need.

Americans have long considered food, clothing and shelter to be inherent, guaranteed products of our society. Today, however, medical care has been added to this list of guaranteed necessities.

Could it be that other so-called necessities will be added as they are recognized as expedient by the social planners? How about recreation, dental care, transportation, or utilities? Or, I might add facetiously, freedom from voting and/or relief from the burden of choosing our leaders?

It is time to quit promising a grab-bag to satisfy all human *wants*, and to begin talking about what will happen to self-reliant people if they don't distinguish *needs* from *wants*, and if they don't realize soon that there is no way in this world to get something for nothing.

The medical profession may properly consider this task as a dutiful mission in these days when so many groups and individuals are telling us what we must do. After all, healthy, well-informed minds are well within the scope of good medical care.

Harlan Thomas MD

Echoencephalography

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Echoencephalography is a relatively new and useful diagnostic aid in the evaluation of patients with suspected intracranial abnormalities.

DEFINITION

ECHOENCEPHALOGRAPHY is a diagnostic method utilizing an ultrasonic generator which reflects sound beams from various interfaces of the skull and its contents. It has been found to be of especial value in demonstrating the position of the mid-line structures.

HISTORY

Dussik, in 1942, suggested the use of ultrasound in studying the brain and detecting abnormalities. In 1956, Leksell was the first to describe the method and measurement of the mid-line brain structures as revealed by

the ultrasound echo. Monographs appeared in 1961 by Jeppsson and then by Lithander which further discussed application of this method in the study of intracranial abnormalities. In March, 1963, Ambrose and Ford published their results and conclusions based on 1,000 cases. It is of note that of their 1,000 patients, 867 had further radiographic investigation which confirmed the echo findings with the following percentage of accuracy:

1. Five hundred and forty-one cases revealed no displacement of the mid-line echo. Of these, 24 were incorrect; 517 were correct for an accuracy of 95.6 per cent.

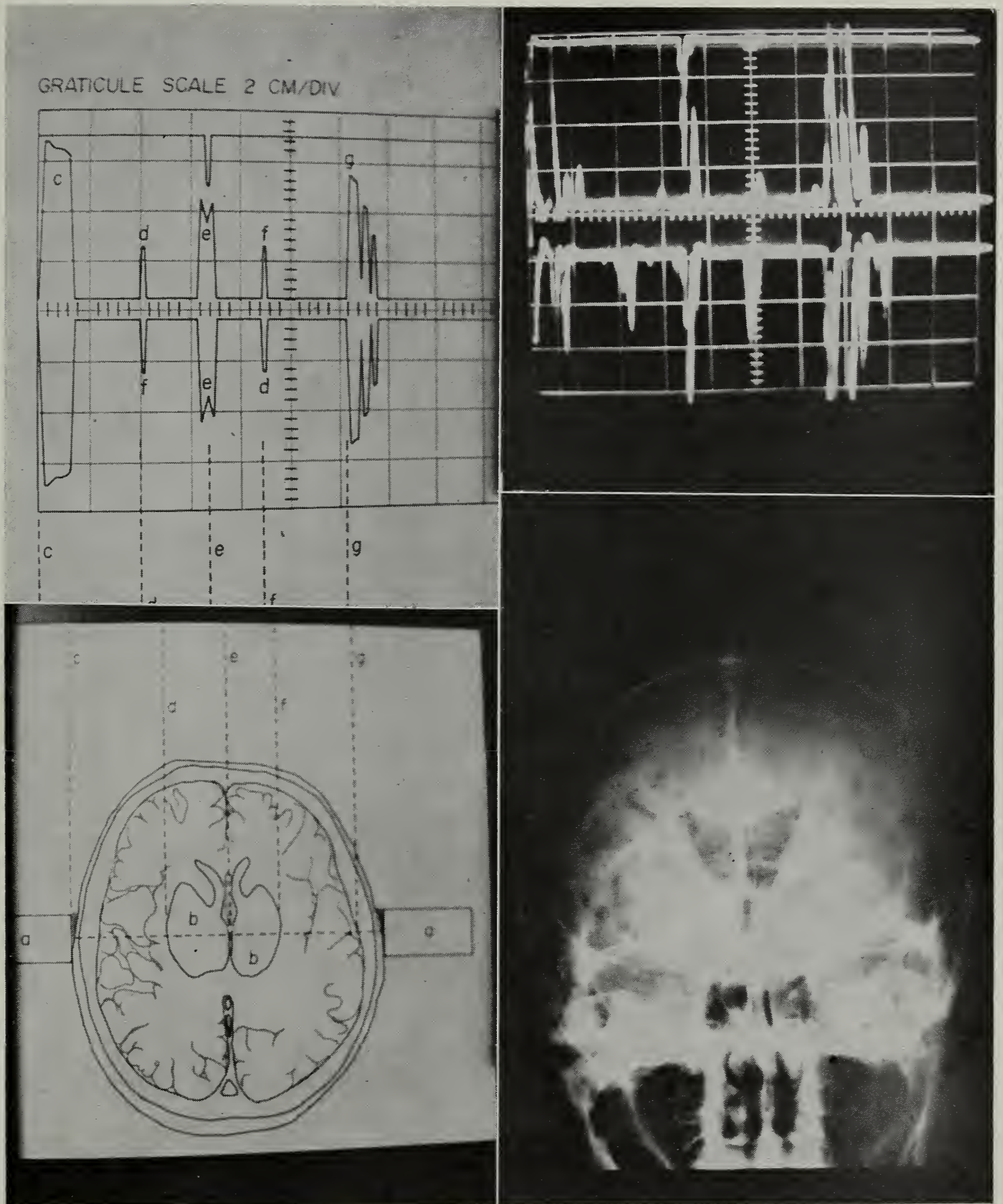
2. Three hundred and twenty-six cases did reveal a displacement of the mid-line echo. Of these, 29 were incorrect; 297 were correct for an accuracy of 91.1 per cent.

3. One hundred and thirty-three cases had no further diagnostic testing and are, therefore, excluded from the statistical survey.

PRINCIPLE AND TECHNIQUE

An ultrasonic beam (*i.e.*, a sound wave of greater than 20,000 cps) is generated from a small transducer held against the scalp at about the pinna of the ear. The beam passes through the skin, muscle, skull, brain, body of the lateral ventricle and then the various mid-line structures which would include the

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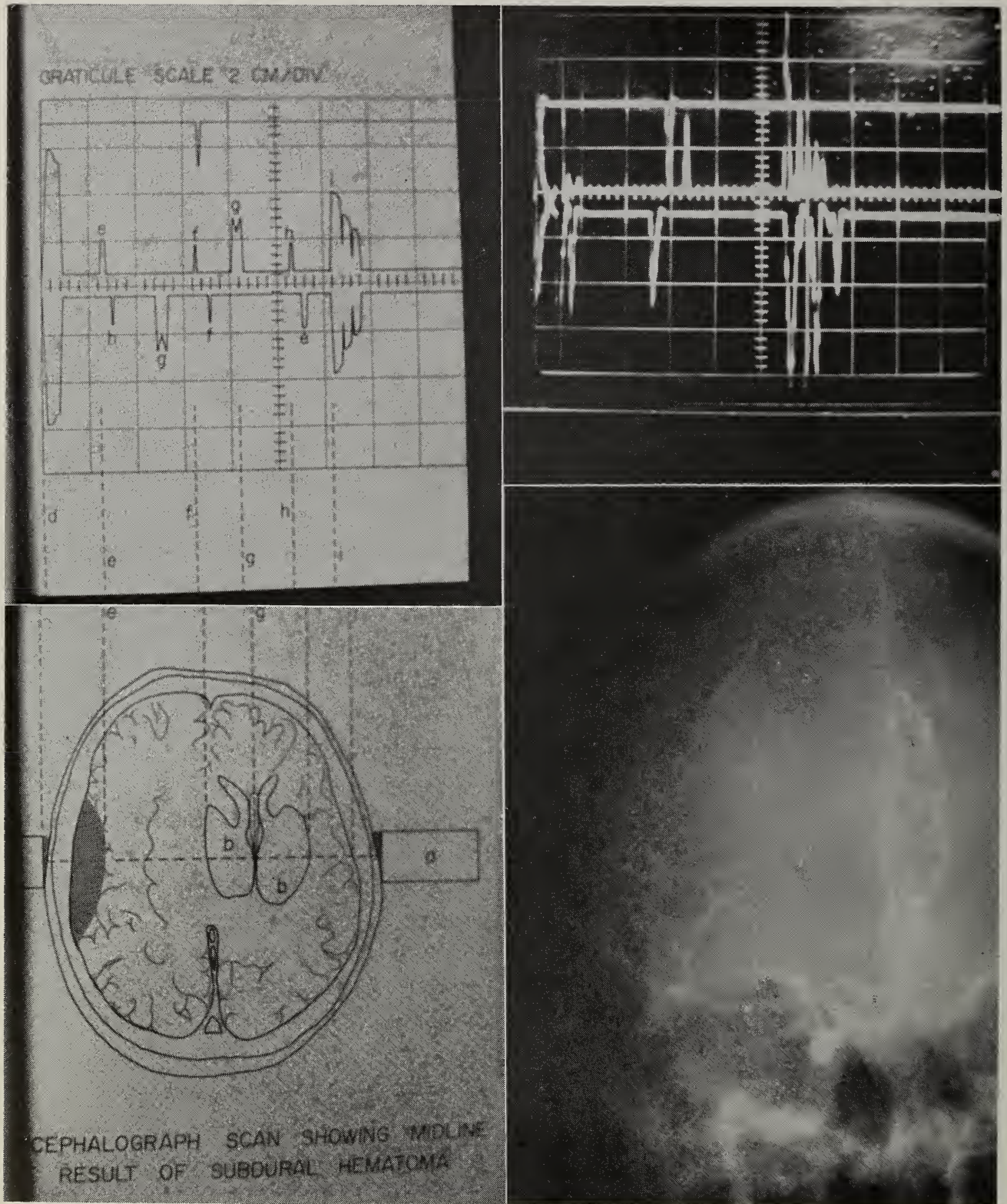


a. Transducers
b. Lateral ventricles
c. Near wall

d. Lateral wall of right lateral ventricle
e. Mid-line echo
f. Lateral wall of left lateral ventricle

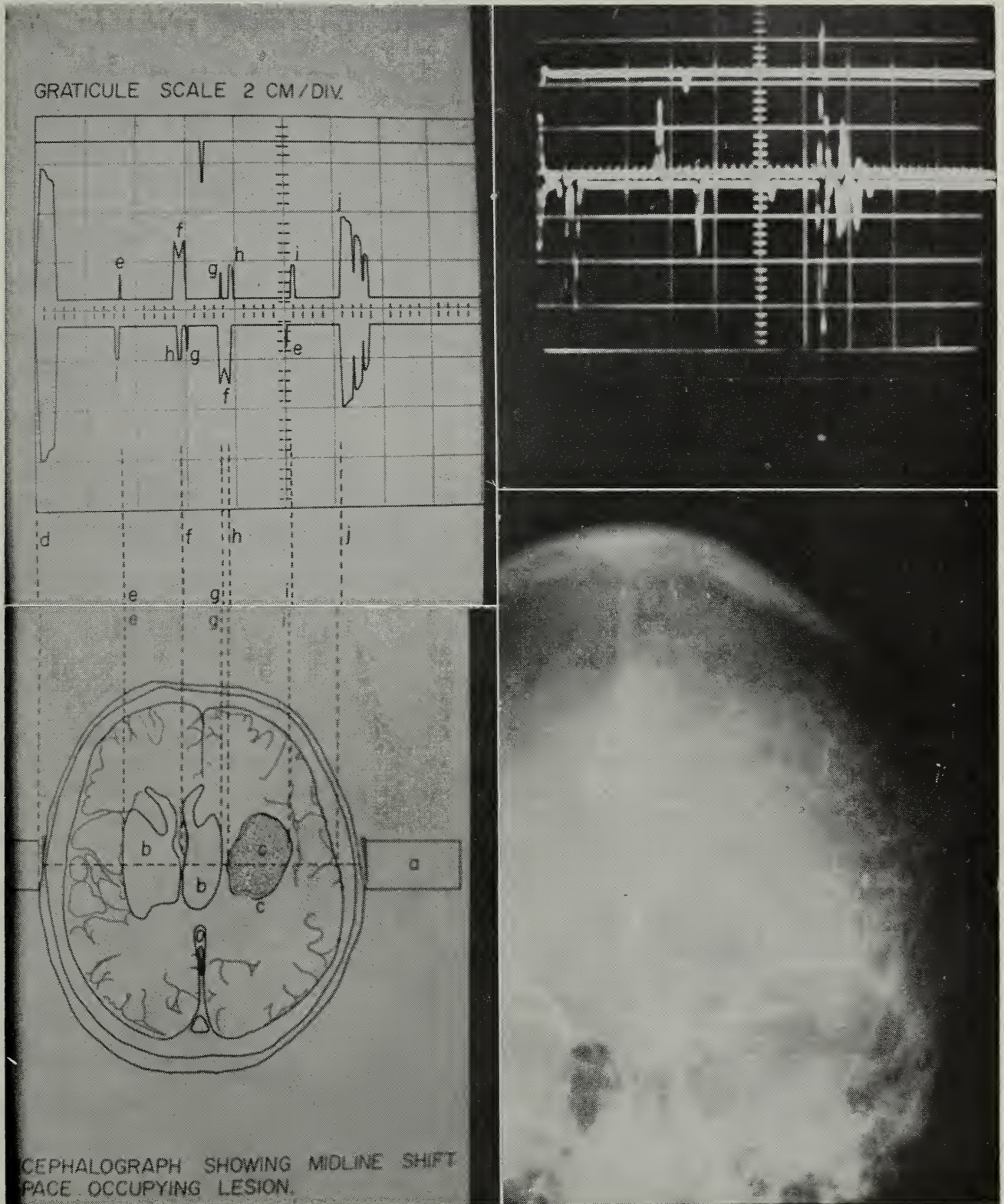
g. Far wall

Figure 1



- a. Transducer
- b. Lateral ventricles
- c. Subdural hematoma
- d. Near wall
- e. Subdural interface
- f. Lateral wall of right lateral ventricle
- g. Mid-line echo
- h. Lateral wall of left lateral ventricle
- i. Far wall

Figure 2



- a. Transducer
- b. Lateral ventricles
- c. Tumor
- d. Near wall
- e. lateral wall of right lateral ventricle

- f. Mid-line
- g. Lateral wall of left lateral ventricle
- h. Tumor wall
- i. Tumor wall
- j. Far wall

Figure 3

Echoencephalography

pineal gland, septum pellucidum, falx cerebri, longitudinal fissure, and the aqueduct of Sylvius. The beam then continues across the cranium to the other half of the brain and finally the contralateral skull, muscle and skin.

At each of the tissue interfaces, a portion of the beam is reflected back to the transducer and a portion then continues in the described path. For each part of the beam that is reflected, the receiving portion of the transducer projects a deflection on a monitor. Therefore, a record is made passing the beam from the right to the left; then from the left to the right; and finally, using two transducers aimed at each other, there is recorded a deflection which represents the geometrical center of the skull. One then simply measures the amount of deviation of the mid-line structures from the geometrical mid-line. A deviation of greater than three mm. is considered abnormal.

A Polaroid camera is attached to the machine which makes a permanent record of the tracing.

EXAMPLES

The following three cases illustrate the use of echoencephalography in the study of patients with suspected intracranial abnormality.

ADVANTAGES

1. The echoencephalogram is a quick, simple and accurate study that is of assistance to the clinician in evaluating the position of mid-line structures of the brain.

2. The method is harmless, painless and is of no inconvenience to the patient.

3. The examination can be made at repeated intervals and the permanent photo-

graphic records compared to observe the progress of mid-line position. This has proven to be of particular value in following the progress of patients with head injury.

4. The machine is easily portable and can be used at the bedside, or in the emergency room.

5. The examination is easily accomplished on infants or small children.

DISADVANTAGES

1. At present, the method is rather coarse and can be expected to aid only in demonstrating a shift in the mid-line structures when produced by a supratentorial lesion of sufficient size to cause deviation. It will rarely yield information regarding the nature of the displacing lesion.

2. Certain lesions will not routinely reveal a shift of the mid-line echo. These include posterior fossa, frontal and occipital lobe abnormalities.

3. Skull asymmetry, an abnormally thick skull (*e.g.*, Paget's Disease) or bilateral space occupying lesions may be misleading.

CONCLUSION

Echoencephalography is a valuable adjunct to the study of patients suspected of having intracranial space occupying lesions. □

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St. Anthony Hospital, Oklahoma City, Oklahoma

Subclavian Steal Syndrome

CASE REPORT

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WILLIAM E. PRICE, M.D.
GILBERT S. CAMPBELL, M.D.

Arteriosclerotic occlusive lesions of the proximal subclavian artery may cause reversal of flow in the corresponding vertebral artery, thus aggravating basilar artery insufficiency.

ARTERIOSCLEROTIC LESIONS of the extracranial vessels have been amenable to surgical correction within the past decade. The symptomatology varies widely depending upon the location and extent of occlusion and the adequacy of collateral circulation through the circle of Willis. The obstructing arteriosclerotic plaque may be located in the chest or in the neck vessels and either the carotid or vertebral systems may be involved.

Bizarre patterns of vertebral flow may result from extracranial vascular occlusion. One of the most unusual flow patterns resulting in cerebral vascular insufficiency without direct involvement of either the carotid or vertebral vessels is the subclavian steal syndrome. This is a phenomenon of retrograde flow in a vertebral artery secondary to a pressure drop distal to a subclavian arterial occlusion at its origin. This paradox of priority has been called the "Subclavian Steal Syndrome."¹

A 57-year-old white female was admitted to St. Anthony Hospital on December 31, 1963. She gave a three-week history of recurrent dizziness, near syncope and nausea. She had no visual disturbances, paresis or paresthesias. There were no auditory disturbances. She had been on antihypertensive treatment and her symptoms had been attributed to postural hypotension. One day prior to admission she experienced a syncopal episode, fell to the floor and was momentarily unconscious. She was examined by her physician at that time and had no neurological sequelae.

There was no history of arm claudication.

PHYSICAL EXAMINATION

The patient was a well developed, well nourished white female in no distress. She appeared neither acutely nor chronically ill. The blood pressure was 178/90 in the right arm, 92/70 in the left arm, pulse 84, respiration 20 and temperature 98.6°. Examination of the neck revealed diminished pulsation in the left supraclavicular fossa. The carotid pulsations were normal. There was a loud systolic bruit in the right supraclavicular fossa. The right brachial and radial pulses were strong. The left brachial and radial pulses were present, but definitely diminished. The lung fields were clear to percussion and auscultation. The heart exhibited normal sinus rhythm. There were no murmurs. There was no clinical cardiomegaly. The abdomen was soft. There were no mass-

es, tenderness or bruits present. The lower extremities had normal pulses. There was no cyanosis, clubbing or edema.

LABORATORY DATA

The hemogram and urinalysis were normal. The fasting blood sugar was 100 mgm%. The blood urea nitrogen was 13 mgm%. The serum cholesterol was 189 mgm%. The chest x-ray was normal. The electrocardiogram was suggestive of left ventricular hypertrophy. On January 3, 1964 a right brachial arteriogram was done (figure 1). The contrast material was injected into the right subclavian artery. There was prompt opacification of the right carotid and vertebral arteries. On subsequent films the

bolus of dye was seen to enter the basilar artery and then flow retrograde down the left vertebral artery into the left subclavian artery. There was abrupt termination of the left subclavian artery proximally with increased opacification in this area on the subsequent film, indicating obstruction at this point. The diagnosis was obstruction of the proximal left subclavian artery with subclavian steal syndrome.

On January 6, 1964 a left posterolateral thoracotomy was done through the bed of the fourth rib. There was complete occlusion of the left subclavian artery secondary to an arteriosclerotic plaque from its origin at the aortic arch for approximately two cm. Distal to the obstruction there was only a faint pulse in the subclavian artery. The left common carotid, left vertebral, and distal left subclavian arteries were normal. The me-

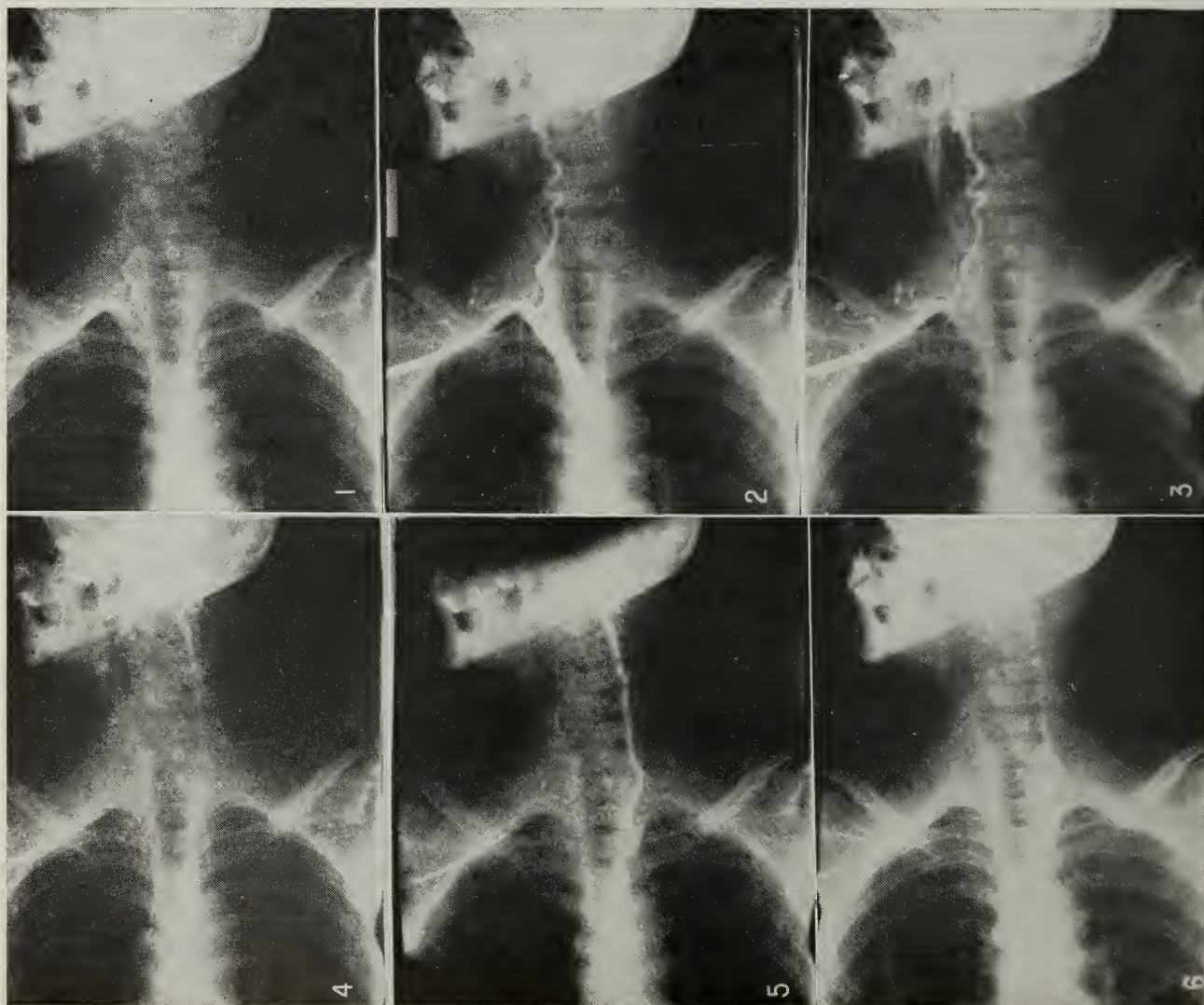


Figure 1. Right brachial arteriogram demonstrating retrograde flow in the left vertebral artery and proximal obstruction of the left subclavian artery.



Figure 2. Operative approach of proximal left subclavian arterial occlusion.

diastinal pleura was incised along the aortic arch and up the left subclavian artery. A Satinsky clamp was used to partially occlude the thoracic aorta at the origin of the left subclavian artery. The distal subclavian artery was occluded with a vascular clamp. A longitudinal incision was then made in the subclavian artery extending proximally into the thoracic aorta and distally beyond the obstruction (figure 2).

The atherosclerotic plaque was then dissected free in its medial plane. Examination of the specimen revealed that approximately 85 per cent of the occlusion was atherosclerosis and there was thrombosis in the remaining lumen resulting in complete occlusion. It is postulated that the onset of her symptoms coincided with central thrombosis of the plaque and consequent complete obstruction of the left subclavian artery. The distal intima was then tacked to the media in four quadrants with 6-0 arterial silk sutures.

Brief release of the aortic clamp revealed no proximal obstruction. The arteriotomy was then closed with 5-0 arterial silk. Following release of the vascular clamps there was vigorous pulsation in the distal subclavian artery. A routine thoracotomy closure was done. Post-operatively the patient had strong pulsations in the left upper extremity and equal blood pressure in both arms. The right supraclavicular bruit was no longer present. The soft left supraclavi-

cular bruit was diminished. She had an uneventful post-operative course and was discharged on the eighth postoperative day. She has been free of symptoms since surgery, with no evidence of dizziness or syncope.

SECOND CASE REPORT

A 58-year-old white male, retired laborer, was admitted to the Oklahoma City Veterans Administration Hospital May 4, 1964. He had experienced light-headedness for the past three years which had increased in frequency. In April 1963, he had an aorto-femoral by-pass graft for increasing claudication beginning in both hips and involving the legs. Following this operation the cerebral symptoms increased and he experienced dizziness and diplopia almost daily, progressing to three or four times a day shortly before admission. The other most prominent symptom was weakness in his arms, and elevation or exercise of the arms aggravated the symptoms. There was no syncope, nausea or auditory disturbance, but he did have difficulty with slurring of speech.

PHYSICAL EXAMINATION

The patient was a well developed, well nourished, white male in no distress. The blood pressure was 100/80 in the right arm and 78/70 in the left arm. The pulse rate was 90 per minute and the respiration rate was 16 per minute. Both carotid pulses were full. There was a loud bruit over the right supraclavicular fossa and a thrill was palpable in the right carotid and right subclavian arteries. There was no bruit on the left. The right brachial and radial pulses were weak and these pulses were not present on the left. There were strong full pulses throughout the lower extremities, the femoral pulses were those present in the bilateral aorto-femoral by-pass grafts. The lungs were clear to percussion and auscultation. The heart had a normal sinus rhythm without cardiomegaly. There was a grade two systolic murmur heard in the right third intercostal space radiating into the right neck. The abdomen had a well healed midline incision with a palpable abdominal aorta. The extremities exhibited no cyanosis, clubbing or edema.

LABORATORY DATA

The hemogram and urinalysis were normal. The fasting blood sugar was 76 mg%. The blood urea nitrogen was 18 mg% and the serum cholesterol was 212 mg%. The chest x-ray was normal and the electrocardiogram showed occasional ventricular extrasystoles. On May 11, 1964, an aortogram was performed by means of catheterization through the right brachial artery. This showed a small plaque at the take off of the innominate artery, but there was prompt opacification of both carotids, the right vertebral and the right subclavian arteries with no opacification of the left subclavian artery. The later films in the series showed opacification of the left vertebral artery beginning cephalad and continuing retrograde in subsequent films. The diagnosis of occlusion of the proximal left subclavian artery with subclavian steal syndrome was made.

On May 21, 1964, a left posterolateral thoracotomy was performed and the pleural cavity was entered through the bed of the fourth rib. There was complete occlusion of the left subclavian artery from its origin extending approximately 3.5 cm. distally, at which point a normal appearing vessel was found. The pleura was incised along the aortic arch and up the subclavian artery throughout the length of its occlusion. Pressure measurements were made at this point and the aortic pressure was found to be 100 mm Hg. and the pressure in the subclavian artery distal to the block was 50 mm Hg. (figure 3). Vascular clamps were placed on the aorta at the origin of the left subclavian artery and on the distal normal subclavian artery. A longitudinal arteriotomy measuring approximately 2.5 cm. was made over the occluded portion of the subclavian artery and an endarterectomy was done removing the occluding segment in its entirety. The clamps were then released slightly to be certain that there was good proximal and distal flow. The distal intima was sutured to the media with four separate sutures of 6-0 arterial silk, and the arteriotomy closed with a running cardiovascular suture of 5-0 silk. The clamps were released and pressure meas-

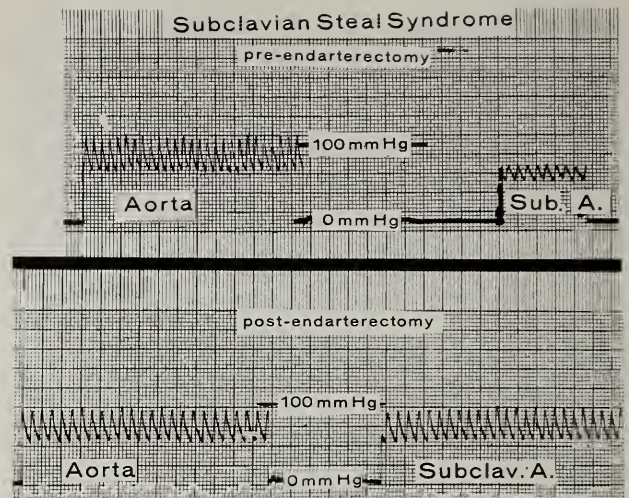


Figure 3. Aortic and left subclavian pressure tracings made before and after left subclavian endarterectomy.

urements again made revealing a pressure of 100 mmg. Hg. both in the aorta and distal subclavian artery. A routine chest closure was performed. The patient had an uneventful recovery. He has had no further dizziness, diplopia or dysarthria since surgery. Blood pressure measurements in the left arm now are 150/90 and 100/75 in the right arm.

DISCUSSION

The symptoms of the subclavian steal syndrome are those of vertebral-basilar ischemia. These may be aggravated by exercise of the upper extremity on the involved side and may be associated with claudication or ischemia of that extremity. Classically the cochlear-vestibular, visual and auditory systems are affected. Dizziness, vertigo, diplopia, blurred vision, partial deafness, tinnitus, headache, nausea and vomiting may occur.² The diagnosis is suspected when a patient with one or a combination of these symptoms is found to have a bruit in the base of the neck and a diminished or absent brachial pulse. The diagnosis is confirmed by arteriography. The true pathophysiology of this condition was elucidated by Reivich, Holling, Roberts and Toole in 1961.³ Using an electromagnetic flow meter they demonstrated in both human and canine studies that occlusion of the subclavian artery at its origin resulted in reversal of flow in the corresponding vertebral artery. This was associated with a compensatory increase in blood flow through the opposite vertebral and both

carotid arteries, but the total effect was a 41 per cent decrease in cerebral blood flow. In one patient retrograde vertebral flow was measured at 120 cc per min.

Consequently, with proximal obstruction of the subclavian artery, the lowered pressure in the vertebral artery allows reversal of flow through the basilar artery as an unwanted and detrimental collateral vessel for the distal subclavian circulation.

SUMMARY

Two patients with subclavian steal syn-

drome have been presented along with a brief discussion of the symptomatology and pathophysiology of this syndrome. □

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STATE-FEDERAL HEALTH PROGRAMS GROW

The federal-state Kerr-Mills is paying part or all of the costs of medical care, including hospitalization, for thousands of aged Americans who need such help.

Payments for medical care under the Nation's federally-aided public assistance programs neared the \$1 billion mark in 1963—an increase of almost \$150 million over 1962, according to recent Health, Education and Welfare Department figures.

Almost three-quarters of the total—nearly \$745 million—was for medical assistance to the aged under the Kerr-Mills Old Age Assistance (OAA) and Medical Assistance for the Aged (MAA) programs. These costs alone increased by nearly \$110 million over 1962.

Medical Assistance for the Aged, totalled \$330 million, an increase of \$79 million over 1962, while medical care costs for recipients of Old Age Assistance totalled \$415 million, an increase of \$31 million over 1962. The MAA program covers the aged who can provide for themselves ordinarily but need help on their medical expenses. The OAA program provides medical care for the aged on public welfare rolls.

Total costs of medical care in 1963 for the needy aged, blind, disabled, and families with children totalled \$964,276,000, a large percentage of which was paid for hospitalization.

The figures for 1963 showed that the federally-aided programs:

- Hospital bills accounted for about 40 per cent of the expenditures, or \$384,888,000, an increase of \$52 million over 1962.
- Nursing homes received \$333,867,000, an increase of \$62 million over 1962.
- Physicians were paid \$88,942,000, increased \$7 million.
- Dentists received \$21,203,000, increased \$3 million.
- Drug payments totalled \$89,216,000, increased \$12 million.
- Various other services such as optometrists, podiatrists, special medical supplies, etc. totalled \$46,072,000.

How Often Are We Wrong? or The Epidemiology of Doctor Error

GAYLORD S. KNOX, M.D.

*We are often wrong—why and
what to do about it are
explored in this article.*

THERE IS a surprisingly large and significant degree of observer error associated with many of the procedures and techniques of clinical medicine. The size and sources of a portion of this error have only become apparent in the last few years.

Patients come to us, as physicians, when they are in distress and because they are in distress they tend to endow us with qualities we may or may not possess.

“Three faces wears the doctor: when
first sought

An angel's and a God's the cure half
wrought;

But when, the cure complete, he seeks
his fee

The devil looks less terrible than he.”

—Anonymous

illustrates a common attitude. This is being brought up again because it has a direct bearing on the problem of observer error.

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In the course of making daily decisions affecting life and death we begin to believe that we are more than others. We do in fact come to believe ourselves to be “gods”; when we speak we automatically assume we speak the “truth.” These feelings on our part are understandable of course and have a rational and logical background.

In medical school, the teachers were right. Professors were not only always right but they always knew the answers, therefore they were, in a word—infallible. When laboratory data were quoted there was seldom any question concerning the validity of the test results. We all read the clinical pathological conferences, we all attended the final conference, in the morgue, and here of course we were given the final “answer.” In this situation the professor was the pathologist and his pronouncement was a “fact.”

Later on we entered our internship and in the hectic pace of the accident room or in the drama of the operating theater or the humbling ward rounds, how many times were we “raked over the coals” because we missed an “obviously consolidated left chest” or were admonished to “please be more accurate” in our history taking—all of course by people who we believed had the answers. As we became more sophisticated we no longer believed in someone else's absolutes. The Chief wasn't always right; perhaps on rare occasions he even accepted our opinion, or may-

TABLE I

Summary of Findings in Clinical Tests and Laboratory Tests Dealing with Error.

1. Diagnosis of Myocardial Infarct (Paton ²²) 214 Autopsied patients	56% error										
2. Diagnosis of Emphysema (Fletcher ¹⁰) 20 patients, 8 expert internists	33-85% disagreement on simple signs										
3. Disease of the Tonsil (Bakwin ¹) 389 children, 3 groups of observers	174-324 recommended for removal										
4. Nutritional Status (Derryberry ⁷) 221 children, 11 pediatricians	Malnutrition 90 range 32-47 agreed on by all 7										
5. Taking of Medical Histories (Cochrane, et al. ¹) 993 miners, 4 observers	Percent reported with: cough 23-40 sputum 13-42 dyspnea 10-18 pain 6-17										
6. Reliability of History in Diagnosis of Duodenal Ulcer (Dunn and Etter ⁸) 206 consecutive patients	29-49% histories failed to reveal presence of radiologically proven ulcer										
7. Interpretation of Electrocardiograms: Davies ⁶ —100 sets, 10 observers Segall ²³ —100 sets, 20 observers	approximately 20% inter- and intra-individual variation										
8. Clinical laboratory procedures (Belk and Sunderman ²) Standard samples to 59 hospital laboratories	<table> <tr> <th>Material</th><th>% gross error</th></tr> <tr> <td>Hb</td><td>22</td></tr> <tr> <td>glucose</td><td>10</td></tr> <tr> <td>protein</td><td>15</td></tr> <tr> <td>calcium</td><td>28</td></tr> </table>	Material	% gross error	Hb	22	glucose	10	protein	15	calcium	28
Material	% gross error										
Hb	22										
glucose	10										
protein	15										
calcium	28										
9. Radiation effect on the thyroid gland (Miller, et al. ³⁰) Treated and untreated thyroid gland—39 patients, 135 readings	False positive—6.5% False negative—37.5%										
10. Erythrocyte counts (Magath, et al. ¹⁹)	16-28% gross variation										

After Garland¹³ and modified.

be our opinion turned out to be "correct." This of course increased our estimation of ourselves and showed us that "young minds at work on this problem have a clear and rare grasp of the facts."

Occasionally, however, we found ourselves making an obvious mistake or error. This was usually when the error was pointed out to us in no uncertain terms.

To restate the present problem: there is a very large and surprising degree of inaccuracy in the interpretation or evaluation of many clinical and laboratory procedures used in everyday practice. The mere existence of, far less the extent of, the resulting diagnostic error is very little appreciated. Some investigations have been made into these problems, and these are summarized here (table 1).

Paton,²² at the Royal Infirmary in Edinburgh, studied over 1,000 patients who had been admitted with a clinical diagnosis of myocardial infarction. Autopsy was performed on 214 of those who died. The diagnosis of myocardial infarction was confirmed in 118. Conversely, infarction was revealed

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at autopsy in 52 patients in whom it was unsuspected clinically. The accuracy rate in the diagnosis of myocardial infarction was 44 per cent. Of course, many of the cases were acutely ill, difficult to examine and electrocardiograms were not available in all. Nevertheless, Paton regarded the degree of error as surprising.

Fletcher,¹⁰ at the London Postgraduate Medical College, arranged with eight experienced internists—all Fellows of the Royal College of Physicians, to examine the chests of 20 patients with emphysema, in order to assess the validity of well-known physical signs. Agreement on the presence of the most simple sign was observed in only 20 per cent of the tests! Many signs produced a two-thirds agreement only, which he felt was not much better than chance. In this study, the observer's final integration of all the separate signs into a diagnosis of emphysema showed no greater consistency than did the individual signs, so that the integrated conclusions were no more consistent than the isolated observations on which they were based!

Bakwin¹ reported a study of 1,000 school children regarding the need for tonsillectomy. Of these, 611 had had their tonsils removed. The remaining 389 were then examined by other physicians, and 174 were selected for tonsillectomy. This left 215 children whose tonsils were apparently normal. Another group of doctors was put to work, examining these 215 children and 99 of them were judged in need of a tonsillectomy. Finally, another group of doctors was employed to examine the remaining children and nearly one-half were recommended for operation. In the end, there were 65 of the original 1,000 whose tonsils had not either been removed or recommended for removal. Bakwin concluded that there was no correlation between the estimate of one physician and another regarding the advisability of tonsillectomy and he added that economic conditions played no part in the recommendation in this particular series.

Derryberry⁷ reported a study of 108 boys by experienced pediatricians, and 113 girls by five experienced women physicians, who were asked to classify them according to nu-

tritional status. They made complete clinical examinations and employed such diagnostic aids as they desired. In the entire series, the number of children reported as suffering from malnutrition varied from 28 to 47 and these were not the same cases. There were 90 in which one or another examiner diagnosed malnutrition, but only seven in which all examiners agreed.

Cochrane, *et al.*,⁴ reported a study of observer error in taking medical histories. Some four physicians interviewed 993 coalminers concerning certain common symptoms. These observers asked the miners the same questions. The wide range in recorded responses is remarkable and shows that a history *is* very liable to be biased by the attitude of the recorder and that symptoms, like beauty, are likely to be in the eye of the beholder.

Dunn and Etter⁸ report on the reliability of the clinical history in the diagnosis of duodenal ulcer. For one group of 206 consecutive men examined whose films were interpreted by one radiologist, the medical history failed to reveal the presence of radiologically demonstrated ulcers in 49 per cent. For a specially selected group of 79 whose films were independently agreed upon as positive or negative for duodenal ulcer by three radiologists, the medical history failed to establish the diagnosis in 29 per cent of the radiologically proven cases.

Davies⁶ studied variations in the interpretation of electrocardiograms. The sample included 50 cases which had been reported as indicating infarction; 25 cases as normal and 25 cases as showing various abnormalities other than infarction. Nine experienced and one less experienced cardiologist interpreted the 100 sets of tracings and were given a choice of reporting them either as normal, abnormal or showing infarction. Some weeks later, the observers read the tracings again. Disagreement was found in all three categories. There was a general or majority agreement on four out of five tracings, but the fifth gave rise to considerable dispute. There was as much difficulty in deciding between normal and abnormal, as there was between abnormal and infarction, and each observer's working definition varied, since after the second reading all were found to have changed their opinions in some

of the tracings. The author concluded that certain leads and certain patterns were particularly controversial, but that "we should not expect too much of the electrocardiograms, and it is true that we recognize that some tracings are of little diagnostic value and are very likely to be interpreted according to clinical bias. In this way observer variation may add to diagnostic error."

Segall²³ also studied variation in the interpretation of the electrocardiogram. He used 20 observers and 100 tracings, 40 of which had been reported as showing infarction, 20 as normal, and 40 with non-specific abnormalities. He found that among the group of 20, all agreed on 21 tracings, and a majority agreed on only 33 of the tracings. He concluded that "our present state of knowledge of electrocardiography requires modification along several lines."

Belk and Sunderman² conducted a study of the results of chemical analyses of standard solutions in 59 hospital clinical laboratories. The results showed wide variation in the reports of the various laboratories. The extent of gross error ranged from five per cent to 28 per cent, and the "unsatisfactory determinations" ranged from 24 per cent to 59 per cent.

Miller, Lindsay and Daley² studied the reliability of the pathologic diagnosis of radiation effect on treated and untreated thyroid glands in a series of 39 patients at the University of California. They concluded that the error rate was significant. Some four per cent false positives and 27 per cent false negative readings were obtained. After their test-retest studies, they concluded that the "histologic criteria in this field need considerable refinement."

Magath¹⁹ studied fluctuations of the erythrocyte count under standard laboratory

TABLE II

Accuracy of Palpation in the Diagnosis of Axillary Node Disease in Breast Carcinoma

	Clinical Diagnosis	
	Positive Nodes	Negative Axilla
	Negative at operation	Positive at operation
Harrington	32%	29%
Hagensen	15%	44%
Siris and Dobson	29%	14%

From Garland¹²

TABLE III

Variation in Interpretation of Chest Roentgenograms (Mostly unselected survey material)

	% underreading of Positives	% overreading of Negatives
Birkelo, et al. ³	25	—
Garland, et al. ¹⁴	27	1.7
Yerushalmy, et al. ²⁷	32	1.7
Groth-Petersen, et al. ¹⁶	32	2.0
Danish Tuberculosis Index		
Bull. W.H.O. 1955	—	1.6

From Garland¹²

conditions. They reported a gross variation ranging from 16 per cent to 28 per cent depending in part on the degree of training of the technician.

Garland¹² has summarized the results in palpation of the axilla for positive nodes prior to breast surgery. Again the range of error is apparent (table II).

By making "loaded" films or by dual or triple reading radiologists have been able to check the accuracy of their reading. This has been done (table III).

It should be mentioned that there are two different ways of estimating error. Suppose we had 100 films, ten of which showed pathology, and 90 of which were negative. If we missed two positive films and called two negative films positive, then the error, by one method of thinking, would be four in 100 or four per cent, that is, we only read four films inaccurately. However, the film was taken in the first place to *find pathology*, and when we missed two of the ten pathologic films, we really missed *20 per cent* of the *pathology*. This combined with the two negative films, (2/90 or 2.2 per cent inaccuracy in the negative films) would then give us a nearly 22 per cent gross error. This is the way error is being expressed in this paper.

When confronted with the results of the laboratory studies, some pathologists made the same observation that many clinicians have made relative to the other investigations, "impossible." *Most physicians believe that in their own field such a degree of error or percentage of variation in accuracy is unthinkable.*

An editorial in *Lancet* in 1954 commented on the observations on error in interpretation of chest roentgenograms, and rendered the opinion that the practical significance of

these factors in general medicine is probably very small. Action, it read, seldom follows the result of a single observation, and the discussion, consultation and re-examination that usually precede the final diagnosis or decision, greatly reduce the hazard from this sort of error. This is indeed optimism. All of us are familiar with examples of action, based on a single positive electrocardiogram, bronchoscopy, biopsy or other test. Although the errors of all of these procedures have not yet been submitted to a statistical analysis, there is no reason to expect them to be less than those in the studies listed above. Likewise many clinicians continue to *believe* that their observations are *accurate* and are *unaware* of the need for consultation and re-examination to reduce error. They understand that laboratory or Roentgen "tests" may be subject to faulty interpretation but certainly not careful "observation."

Not only should clinicians recognize their own errors, but also should admit them in their teaching. Students should be taught obvious and useful signs and should not waste their time on refinements which must be subject to gross errors. Diagnostic procedures of all kinds should be subjected to the test of observer error before they are published in texts and taught to students.

What is a source of many of these errors that have been cited? Most of us assume that, except in occasional, perhaps borderline, instances, the signs we observe are present and those that we do not observe are absent.

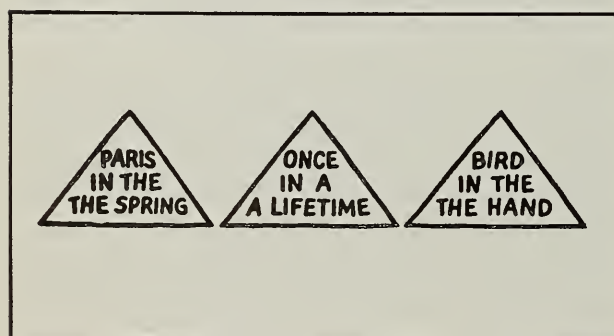


Figure 1: THREE TRIANGLES
from Garland, L. H. Accuracy of Diagnostic Procedures
Am. J. Roentgen. 82:30 July 1959
Courtesy author and publisher Charles C. Thomas



Figure 2: (See text for caption)
from Street, R. F. A Gestalt Completion Test, etc.
Courtesy Bureau of Publications
Teachers College, Columbia University, New York

Two simple examples of non-medical perception may be used to illustrate the fact that a sign may be present one time and absent at another for the same observer. One of these is the three triangles of Brooks (figure 1) which illustrates the fact that we tend to notice only those things which we consider significant. *What* is seen depends on the store of *information* that the *observer brings into the perceptual act*. The second example (figure 2) shows that what is seen often depends on the information supplied with the pattern. To decipher the shadows one needs to know that it is intended to represent a horse and rider. We may be surprised to find that we have missed three simple words in one figure and the horse and rider in the other. We saw them but did not recognize them.

Left to ourselves, most of us would be sure that we had read the three triangles correctly the first time and that the second figure is a meaningless series of blots. *Perception*, then, is a process involving *judgment* as well as seeing. *What* is perceived is in part *constructed* by the observer and depends on the observer's innate search for meaning. As a result, what we perceive is literally as plausible as we can make it on the basis of prior experience influenced by an indeterminate

number of other immediate or remote factors.

To behold is not necessarily to observe.

Diagnosis is the cornerstone of modern clinical medicine. It *requires* accurate observation, rational deduction and, in its most complete form, is the process of identifying a disease by considering the history, symptoms, physical signs and results of every other type of examination of the patient. It includes differential diagnosis and provides a basis for prognosis. The process usually contains some element of uncertainty, and so diagnosis should perhaps be better redefined as the procedure for reaching the most probable conclusion on the basis of *facts at hand*. Judgment, as we all well know, is often made in an intuitive flash, but how often do we realize that it is determined by a multitude of interacting factors. At the moment of making a judgment, we are usually unaware of many of these factors so the validity of their contribution to the judgment cannot be questioned or examined.

How many of us expect to find cancer in the old "crock" or an ulcer in that old biddy who is always parked in our office? A doctor once said, "I was all set to throw that hostile female out of the office, to tell her to go back and go to work, when I decided that first I should read her x-ray report. Lo and behold, she had an active ulcer! That being the case, I had to swallow *my* hostility and go back to treat her." The fact that observation depends a great deal on information brought into the *act* of observing by the *observer*, and is influenced by *attitudes* of the observer, is illustrated by the organic diseases that are occasionally missed by psychiatrists in the disturbed patients, or that are overlooked in psychiatrically disturbed patients by other physicians.

To recognize this fact, that is, the fact that our *observations* are influenced by our *attitudes*, and to realize that our judgments are always influenced by a multitude of interacting factors, some of which we are completely unaware, is perhaps to go a little way to free ourselves from what Bertrand Russell called "The tyranny of the Here and Now."

A conclusion, of course, in looking for a solution to this problem of observer error

and inaccuracy in clinical medicine is that we find *no true solution*. We can only improve our accuracy by consultation, by *awareness* that there are errors inherent in all of us, and that these must be lived with. Perhaps we should do as Johnson suggested and try to replace the security of thinking along well defined, familiar channels with a new kind of security based on accepting ambiguity, uncertainty and open choice.

SUMMARY

The accuracy of many diagnostic procedures is subject to distortion from errors in technique of examination and interpretation. The former are correctable with care; the latter are partly correctable with training and experience. Even experienced physicians, however, are found to have an error, a measurable degree of observer error, apparently due to the so-called human equation. Accuracy in diagnosis can be improved by independent examination, either by the same observer on two different occasions, or by two different observers without the knowledge of the other interpretation. Realization of the degree of observer error in all fields should provide a stimulus to greater care in examination, to the increased use of consultation and, above all, a continuous attempt to clarify and correct the factors involved.

Henry Garland concluded one of his articles¹³ by quoting former President Hoover who said: "What do you want—security or self reliance?" Self reliance should include an effort to correct one's mistakes, to capitalize on one's blunders. The only real security is the power to adapt. He added the following suggestions.

1. Study the degree of observer-error in your own work.
2. Attempt to reduce it by high quality and careful work, periodic conferences, and consultation with your colleagues.

Finally, E. D. Palmer,²¹ in a small mimeographed book called *Pearls for the Student of Gastroenterology*, wrote in the foreword: "Whenever one writes for another to read, he faces the terrible spectre that his words will be believed. Dear Student—believe nothing you read here. Know it, and never forget it—but don't believe it. Don't believe

it any more than you would believe what you read in the newspapers, the history books or the instruction book that came with your car. Some of it may be true, but you and I will probably never know which is and which isn't. We must face the fact that if we had to talk about medicine in terms of what we know for sure, we wouldn't have much to say . . . This is of course no excuse for not learning and knowing everything that anyone has to say, and for not taking all into consideration in approaching a clinical problem. This philosophy need cause the student no dismay. It is hoped that it may help block the worst clinical sin of all—the selection of one unknown from many to label as the truth.” □

I am indebted to Doctor L. H. Garland for his kind permission to use much of the material from his article¹³ on this same subject.

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CENTRAL CONTROL OF PROFESSIONAL COMMUNICATIONS?

Some pharmaceutical manufacturers are pouring millions of advertising dollars into national commercial publications, completely bypassing the official journals of organized medicine and jeopardizing their existence.

Maybe they think it sells more pills, or that it's cheaper, but they forget their moral obligation to support locally-controlled media of vital interest to the medical profession and, indeed, to the drug industry itself. At a time when drug manufacturers are desperately attempting to maintain the identity and the research and marketing freedom of component, free enterprise companies, their advertising policies are contributing to the central control of medical communications.

If the present decline in national adver-

tising revenue continues, many official medical society publications will fold-up, and a few commercial publications will have even greater responsibility for professional communications. The average doctor and the average medical society may well be silenced.

There's a place for everything in this world—including the excellent commercial medical publications—but not at the expense of centralized control of medical communications.

Ask your detailman about his company's policies. Manufacturers whose products are supported by the faith of practicing physicians should return the faith by immediately restoring advertising support to the locally-controlled official publications of organized medicine.

ABSTRACTS

ENERGY BALANCE AND OBESITY

The basis of concepts concerning obesity today rests upon the assumption that obesity results from a greater caloric intake than output. It follows that when a patient does not lose weight on a diet prescribed to supply fewer calories than needed, he is cheating on the diet. In this article the author discusses the possibility that these assumptions might not be entirely true. One factor appears to be the amount of activity or muscle tone. It appears obvious that a less active person will gain weight compared to a similar one eating the same diet but indulging in more activity all other factors being equal.

In the utilization of foodstuffs about 80 per cent appears as heat and 20 per cent in forms usable for work. It seems possible that some humans can more "efficiently" utilize this energy resulting in "metabolic" obesity. There is some evidence in animals and humans that the type of diet in relation to content of fat, carbohydrates and protein and the caloric dispersal of meals affect the body's handling of food. Some obese patients do not appear to be able to mobilize fat stores as rapidly as others. Although the concept of metabolic obesity remains a long way from being proved, it has stimulated work on the problem of obesity.

Editor's note: We will all follow developments in this field with interest. Obesity remains one of the most important problems that physicians face today. Any help we can receive in dealing with it will be greatly appreciated.

Energy Balance and Obesity, Joe M. Dabney, M.D.,
Annals of Internal Medicine, 69: 4, 689-699, April, 1964.

DEATH BY HEX?

This article reports a 53-year-old patient without a previous history of asthma or respiratory difficulties who died in status asthmaticus approximately nine months after the onset of symptoms. The symptoms started after the patient's mother predicted dire results if he went against her desires. She used the words "Something will strike you." In a telephone conversation immediately prior to the patient's death she repeated her admonition to "remember her prediction of dire results." Within about an hour the patient was dead.

The author notes that death produced by magical means is a part of man's early culture. He suggests that his thin veneer of civilized intellect covering his primitive emotions protects man from such occurrences today. When this armor becomes too thin, modern man may succumb like his ancestors although less directly and more slowly.

It is impossible to tell whether the response to the mother's threat caused the asthma or merely aggravated it. The author notes that it is difficult for the scientifically trained physician to accept death as the result of a wish of a thwarted mother.

Editor's Note: Physicians will continue to be surprised and amazed by the things that can happen to human beings in health and disease. It is not too difficult to accept the possibility of a "voodoo death," but to explain it in scientific terms is another matter.

A Sophisticated Version of Voodoo Death, James L. Mathis, *Psychosomatic Medicine*, 26: March-April, 1964, 104-107.

PSYCHIATRY, 'BRAINWASHING,' AND THE AMERICAN CHARACTER. Louis Jolyon West, M.D.

Considerable evidence is marshalled to deny the apparently popular thesis that the moral integrity of American youth is deteriorating. The remarkable rarity of American turncoats in the Korean War is considered a tribute to the present American generation rather than an indictment of them. In further support of the new breed the author cites the growing idealism of American youth by serving the Peace Corps and in their general social consciousness.

Doctor West does his best to make this "the best of all possible worlds" in an extremely well written, stimulating paper.

Am. J. of Psychiatry, Vol. 120, 9: 842, March, 1964.

RECENT PUBLICATIONS

The *Journal* welcomes the opportunity to list current publications by any Oklahoma physician.

Inflight loss of consciousness, J. Robert Dille, M.D. and Pei Chin Tang, Ph.D., *Aerospace Medicine*, Vol. 35, No. 6, June 1964.

Dyskinensia in children, J. T. Jabbour, *Pediatric Digest*, pg. 47, Jan., 1964.

Cardiovascular effects of the insecticide endrin, T. E. Emerson, Jr., C. M. Brake, and L. B. Hinshaw, *Canadian J. Physiol. and Pharmacol.*, 42: 41, 1964.

Ebstein's anomaly in the neonate: a clinical study of three cases observed from birth through infancy, Toyoshige Yamanchi and Glen Cayler, *Am. J. Dis. Child*, 107: 165-172, Feb., 1964.

Experimental analysis of a film used as a threatening stimulus, Joseph C. Spiesman, R. S. Lazarus, L. Davidson, A. M. Mordkoff, *J. of Consulting Psychology*, 28: 23-33, Feb., 1964.

Measurement of total pressure of dissolved gas in mammalian tissue *in vivo*. M. T. Lategola, *J. Applied Physiol.* 19: 322, 1964.

Diagnosis of disorders of the ureterovesical junction. William L. Parry, M.D., *New York State Journal of Medicine*, 64, 6, 744-747, Mar. 15, 1964.

Reprints of the above publications are usually available on request from the senior author, c/o Mrs. Joan Campbell, Veterans Administration Hospital, 921 N.E. 13th Street, Oklahoma City, Oklahoma.

Electronics and Electrocardiography

JOHN NAUGHTON, M.D.

In recent years electronic engineers have made many valuable contributions to medical science. Among the more promising developments has been telecardiography, a method of recording the electrocardiogram by radio-telemetry. A signal is modulated by physiological impulses with the reception of the modulated signal by a receiver operating at the frequency of the transmitter.¹ The ECG can be recorded then on a standard machine, oscilloscope or magnetic tape.

Telecardiography has made possible the recording of continuous ECG tracings on an individual for many hours. Since its introduction to clinical cardiology many new and interesting observations about electrophysiology have been documented. Most importantly this method of investigation has further substantiated the limitations imposed on the clinician by the conventional resting ECG and have demonstrated that the conventional ECG does not correlate with the physiological status of the individual in many instances. This fact has been appreciated by

many investigators such as Masters² for many years.

The principles of telecardiography are currently being employed in two investigations at the University of Oklahoma Medical Center. The first study involves the use of the RKG₁₀₀ Radiotelemeter to obtain a single lead ECG recording during rest, varying levels of exercise and recovery. Many interesting observations have been recorded on large groups of presumably healthy people and of cardiac patients during these studies. Examples of the recordings are depicted in figures 1 and 2.

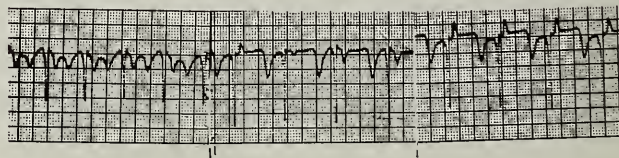


Figure 1. This is an example of ECG changes during continuous monitoring of a presumably healthy 35-year-old white male using the oblique lead. At rest the P-Wave was inverted indicating an ectopic atrial pacemaker which was confirmed by the conventional ECG. During standing the P-Wave was erect followed by a transient wandering atrial pacemaker. The P-Wave then remained positive during work and recovery.

From the Department of Medicine and the Neurocardiology Research Center of the University of Oklahoma Medical Center, Oklahoma City, Oklahoma.

Produced under the auspices of the Professional Education Committee of the Oklahoma State Heart Association.

**Incomplete RBBB with
Complete RBBB during Heavy Work**

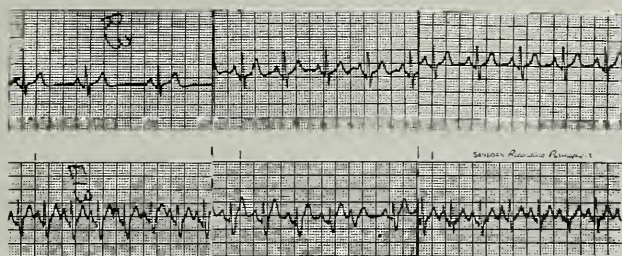


Figure 2. The oblique lead ECG in this apparently healthy 68-year-old white male revealed a prominent S-Wave compatible with an incomplete RBBB which was confirmed by conventional ECG. During the 13th minute of fairly vigorous work the QRS interval broadened with a slight increase in the prominence of the S Wave indicating a complete RBBB. This complete intraventricular block remained for a few seconds during the initial minute of recovery following which it reverted to the original incomplete RBBB form. A phenomenon such as this would probably have been completely undetected had the patient performed the standard Masters' test.

The second investigation, under the direction of Doctor Thomas Lynn, involves the recording of eight hours of continuous ECG on individuals in varying states of health. The Avionics Electrocardioscanner is used in this study.

Although sufficient data are not yet available for a detailed scientific report, the importance of obtaining this type of information is becoming apparent. Investigators have found changes in rhythm, transient intraventricular blocks, ST-T Wave changes and rate alterations in many individuals who have had normal standard electrocardiograms. On the other hand, many patients with grossly abnormal resting ECGs often have very stable recordings during exercise and routine daily activities. The accumulation of this type of data undoubtedly will influence the emphasis placed on the conventional ECG in later years, particularly when the ECG and physiological status of the patient fail to correlate.

Telecardiography also has many potential practical clinical applications. Among these is the continuous recording of the ECG during the Masters' test which obviates the need for several cumbersome electrodes. □

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NEW HEAD FOR A.A.M.C.

Doctor Robert C. Berson, Dean of the University of Texas South Texas Medical School, San Antonio, has been named the next Executive Director of the Association of American Medical Colleges.

He will assume his new position early in 1965, succeeding Doctor Ward Darley, said Doctor George A. Wolf, Jr., President of the A.A.M.C.

"In his eight years as our Executive Director, Doctor Darley has won a national and international reputation as a medical statesman," Doctor Wolf said in making the announcement. "His contributions to medical education have been many, and finding a successor has not been an easy task.

"However, we feel that in Doctor Berson we have found a man who can effectively and constructively take over the reins."

Doctor Berson, 52, is a native of Brownsville, Tennessee. He is a graduate of Vanderbilt University School of Medicine, Nashville, Tennessee, and subsequently became its Assistant Dean. He also has served on the faculties of the University of Illinois College of Medicine, Chicago, and the Medical College of Alabama, Birmingham.

He served as Associate Director of the Survey on Medical Education, which in 1953 sponsored the publication of "Medical Schools in the United States at Mid-Century." Doctor Berson is immediate past President (1963-64) of the A.A.M.C.

A Report on Blue Shield

GEORGE H. GARRISON, M.D.

George H. Garrison, M.D., Oklahoma City pediatrician, was President of the Oklahoma State Medical Association in 1949-50. He has served on the Blue Shield Board of Trustees continuously since 1950.

The following article was presented on October 18th by Doctor Garrison before the annual meeting of the Blue Shield Board of Trustees at Western Hills Lodge, Sequoyah State Park.

BACKGROUND

THE JOURNAL of the Oklahoma State Medical Association, page 210 (1943), states, "The House of Delegates in a far-reaching decision approved the inauguration of an experimental prepaid medical and surgical plan to be operated in connection with The Blue Cross Plan and authorized President James Stevenson of Tulsa to appoint a committee to work out the details for the activation of the plan." July 15th, 1943, at a meeting of the above committee, Doctor John F. Burton, Chairman, reports, "The plan is to be operated in connection with The Blue Cross Hospital Plan and will incorporate

features of other plans successfully sponsored by medical associations."

Further comment in the *Journal*, page 393 (1943), says "The House of Delegates in instructing the committee to proceed in the formation of a prepaid plan, while not anticipating the introduction of the Wagner-Murray-Dingell Bill in Congress, nevertheless has a possible combative instrument for the medical profession."

Page 360 (1944) July 9th, 1944, records: "The committee has found that, in states where all services are included, the plans have not been successful, and that it is best to start with those services which are mentioned in the printed plan and gradually extend the plan to include other types of services."

Page 454 (1944) October 8th, 1944 we find: "The Prepaid Medical Plan Committee prepared its final recommendations for an indemnity plan to be presented to the Council and the House of Delegates October 22nd."

Page 500 (1944): "A special session of the House of Delegates, Doctor C. R. Rountree, President, approved the indemnity plan by 56 to three and instructed the Council to

select a 15-member Board of Trustees—nine physicians and six laymen.”

Thus, Oklahoma Physicians Service, later called Blue Shield, came into being.

IMPLEMENTATION

In the actual implementation of the plan, Oklahoma Physicians Service went into those counties where and when requested by the County Medical Society and set up the formal enrollment. This was done after a preliminary survey in which the nature and cost of publicity for the project had been determined. Local physicians, by donation, paid for the newspaper ads, posters, mailing, etc., and the hospitals volunteered space for the enrollment. This illustrates how intimately and interestedly the medical profession was concerned with launching this new plan. Even more convincing of their interest was the fact that the initially required operating capital, in excess of \$10,000, was provided voluntarily by Oklahoma physicians, clinics and hospitals. Justifying such faith on their part, The Plan repaid the capital investment in August of 1946.

Though the House of Delegates approved the initiation of such a prepaid plan and the Council of the Oklahoma State Medical Association named the first Board of Trustees, the State Association had no financial interest in The Plan and no administrative control of it, but today the OSMA is still invited to submit names to be considered for vacancies on the Board of Trustees.

Later, in 1945, page 257 of the *Journal*, we find, “Prepaid surgical and obstetrical care plan now in operation in five counties,” emphasizing the modest beginning.

The AMA Council on Medical Service had developed a set of “Standards of Acceptance for Medical Care Plans” which included:

1. Approval by the local State or County Medical Association.
2. Responsibility of the medical profession for the medical services included in the benefits.
3. Free choice of physician.
4. Maintenance of the confidential patient-physician relationship.
5. Maximum benefits consistent with sound financial operation.

6. Benefits in terms of either service or indemnity.

7. Sound enrollment and administrative practice.

To these “Standards,” Oklahoma Physicians Service (Blue Shield) has adhered without modification or variation.

A HERITAGE OF FREEDOM

A large percentage of physicians now practicing in Oklahoma have established themselves in private practice since 1945 and, therefore, know little of the basic needs and reasons which led to the formation of professionally sponsored prepaid medical care plans. It was an attempt to provide medical care of a high order to all of our people. It was to avoid a compulsory or regimented medical care system with its inevitable decline in the quality and availability of such services. It was to preserve FREEDOM in this country. In 1934 or 1935, Rexford Guy Tugwell, Ph.D., a member of the New Deal Brain Trust, said in effect that if we control the medical profession, we can control the country. Physicians must become more acutely aware of their responsibility in preserving the freedom of America, and American medicine. In this effort, there is no stronger ally than Blue Shield. The greatest deterrent to foisting upon this nation state medicine, socialized medicine, political medicine, or whatever term you choose to call it, is voluntary prepaid medical care. The faster we can increase the coverage of the major portion of our population, the greater is our chance of thwarting the ever increasing danger of regimented medicine.

Though there are many prepaid medical care plans and insurance companies in this field, the largest, by far, is Blue Shield. Blue Shield is the ONLY ONE in which the medical profession has a voice. The profession has not only been invited, but urged to participate in the formation of Blue Shield policies, to assist in the establishment of a fee schedule for services, to aid in the adjudication of misunderstandings and disagreements, and to submit names for nominations to fill vacancies on the official Board. If these things be true, Blue Shield is our ablest support in the struggle ahead, and it behooves us to uphold it in all of its endeavors.

PROBLEMS NEEDING ANSWERS

Physicians are opposed to compulsion. Blue Shield, likewise, is opposed to compulsion. It is imperative then that they, physicians and Blue Shield, come to a better understanding of common problems. What are some of these problems?

- First is the startling fact that only 25 per cent of the population of Oklahoma is now covered by Blue Shield.
- Second, but of equal importance, is misunderstanding and poor communication about the benefits and limitations of the Membership Contract on the part of both member and physician.
- An apparent failure to appreciate the fact that insurance benefits are never intended to cover 100 per cent of cost of illness.
- Dissatisfaction of member concerning fees charged for services.
- Seemingly inadequate coverage provided by The Plan in "specific" instances, again from viewpoint of both the member and the physician.
- Alleged "hike" in fee when member has insurance.
- The need for information on the part of Blue Shield concerning procedures listed as "IC" (Individual Consideration) in order that a fair and just payment may be made, and the feeling of the physician that he is being unduly imposed upon to provide this necessary information. There can be no equitable schedule of payments for many traumatic cases, and even for the newer surgical and medical procedures as they become accepted methods of management, without a reasonably detailed description of the extent of the injury and/or the procedure in order that a Medical Committee may arrive at a fair compensation.
- It is most important that both the member and the physician understand that diagnostic procedures generally are not insurable.
- The member has a right to know, in advance, approximately what a contemplated surgical procedure is going to cost, and this can be determined in 90 per

cent or more of cases. The physician has an obligation, likewise, in this respect, and should not pass it off. When a physician steadfastly avoids or refuses to discuss the cost of his services, the patient would do well to consider someone else.

- Both member and physician should be aware that surgical and obstetrical services for which Blue Shield provides a benefit, that benefit will be paid whether the service is rendered in a hospital, outpatient department, physician's office, or elsewhere. This knowledge could reduce unnecessary hospitalization.
- Unquestionably, friction and dissatisfaction could be avoided if all members and physicians were aware that the Schedule of Benefits provided by Blue Shield was approved in 1962 by a committee of physicians—members of the Oklahoma State Medical Association—as approximating 85 per cent of the average fee charged for such service at that time. Fees considerably out of line should be explained. For example, on the "400" Blue Shield Schedule:

	<i>Charge</i>	<i>Benefit</i>
Prostatectomy	\$1000	\$255
Removal of coccyx	\$ 500	\$105
Appendectomy	\$ 300	\$150

Fees such as these create a feeling in the patient that either Blue Shield is not meeting its responsibility or the physician is overcharging for his services. Unfortunately, either feeling reacts unfavorably toward both voluntary prepaid insurance plans and the medical profession. This could be obviated by the two points suggested earlier: that there be (1) a frank discussion of the costs involved before major surgery is undertaken, and (2) a realization that much care and consideration went into the preparation of the Schedule of Benefits.

- Utilization, and duration of hospital stay, are other problems concerning medicine and Blue Cross-Blue Shield. Since the inception of The Plans in Oklahoma nearly 25 years ago, the duration of hospital stay has been ten to 12 per cent above the national average for similar plans. On occasion, it has been even higher, and from 1957 to 1963, there was an increase in the average hospital stay from 6.5

days to 7.6 days. Perhaps too often convenience determines, or to some degree affects, the time of departure from the hospital. Coincidentally, during this same period of 25 years, utilization per 1000 members per year exceeded the national average of similar plans by ten per cent.

There must be a real awakening on the part of the Blue Shield member and the physician as to the vital functions which Blue Shield serves and an honest effort on the part of both to assist in fulfilling these functions. A case to illustrate the need for such awareness is that of an obstetrical patient in early pregnancy admitted because of abdominal pain and vaginal bleeding. Clearly, the Contract limits the maternity benefits to ten days hospitalization. This should have been well known by the patient, the physician, and the hospital administrator; and when that period ended, these three should have come to an understanding about the cost of continued hospitalization. Such an understanding then would have prevented unpleasantness later. Not one of these three, the patient, the physician, or the hospital administrator, could rightly escape his responsibility in this respect.

When a physician receives \$33,000 for professional services to 12 families within a period of 16 months, one wonders whether or not such utilization would warrant continuing coverage for these families. It is only natural that other questions arise, also.

Of vital and far-reaching importance to Blue Shield, physicians, and the people of Oklahoma is the operation of the Kerr-Mills Law in providing hospitalization and medical care for the older citizens. Through a rare degree of cooperation and sincere desire to serve the best interests of all concerned, the Department of Public Welfare, Blue Cross and Blue Shield, and the Medical Association of Texas worked out a most satisfactory and practical method of administering the provisions of that law in Texas. It would be well for Oklahoma to emulate this endeavor.

PROGRAM OF PARTNERSHIP

We see, then, there are problems and areas of concern common to Blue Shield and medi-

cine. Blue Shield cannot and will not alone resolve these, because it is dedicated to the freedom of medicine, the free choice of physician, the maintenance of the confidential patient-physician relationship, and any attempt on its part to bring resolution in these areas would mean regimentation. Blue Shield is basically opposed to this. In the "Standards of Acceptance for Medical Care Plans," moreover, it states in paragraph two that it is the "responsibility of the medical profession for the medical services included in the benefits."

By this time, it has become evident that there is need for a much closer working relationship between the Trustees of Blue Shield and the Trustees of the Medical Association to the end that both organizations may better serve the people of Oklahoma. Let us have an end to lip service and half-hearted cooperation; let us bring our inquiries, differences, and misunderstandings to the conference table and engage our most serious efforts to the solution of the aforementioned and other knotty situations facing us.

Blue Shield has been in Oklahoma for 19 years. In this period, it has paid to physicians \$56 million (\$7.3 million in 1963). In these same 19 years, we physicians should have decided whether Blue Shield is to be trusted, whether it has lived up to the basic tenets of its founders, whether Blue Shield is an asset to medicine and its greatest defense against regimentation by the government. If the answers here are all in the affirmative, as I KNOW they are, then let us physicians bury our grudges, quit being suspicious and critical and become constructive, cooperative and helpful. Let us stop the inexcusable abuses occurring year after year which, if continued, will destroy the greatest ally we have. Let us set up a mechanism through organized medicine to improve the efficiency of Blue Shield and inform the physicians of Oklahoma what it really is, and, together, let us do this for our patients, Blue Shield members.

THIS IS THE HOUR OF DECISION.
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OSMA Looks at New Legislature, Anticipated Legislation

Oklahomans will see many new faces walking the corridors and seated in the House and Senate chambers at the state capitol when the 30th Session of the Oklahoma State Legislature convenes January 5th, 1965.

The November 3rd general election resulted in the naming of an almost entirely new Senate and House of Representatives. Due to the federal court's reapportionment order handed down last July, the upcoming session will be comprised of 48 Senators and 99 House members. Heretofore, the Senate had 44 members while the House had 120.

Of the newly elected legislators, the Democrats claimed 78 seats in the House and 41 in the Senate. Republicans held their percentage of representation in each house by electing 21 House members and seven Senators. The majority of Republican strength in both Houses lies in Oklahoma and Tulsa Counties.

Two physicians from Oklahoma County polled majority support to represent their constituents in a newly created Senate and House district. Richard D. Stansberry, M.D., Oklahoma City, was elected to the Oklahoma State Senate and John W. Drake, M.D., Oklahoma City, to the House of Representatives. Both physicians are Republicans and members of the Oklahoma County Medical Society.

The defeat of many incumbents—particularly in the Senate—coupled with greater representation in the heavily populated areas of the state, will give way to the selection of a new power clique. Senator Clem McSpadden of Chelsea, a ten-year Democratic veteran in the Senate and a nephew of Oklahoma's late humorist, Will Rogers, has unoffi-

cially been tagged for President Pro Tempore of the new Senate.

The role of Speaker of the House of Representatives is certain to go to Representative J. D. McCarty, a Democrat from Oklahoma County who has been assured the job for an unprecedented third term. Speaker McCarty has served in the House of Representatives for 24 years.

While no one can predict the effects of reapportionment, a multitude of new legislators, and the rise of a new power structure in the Senate, Thomas C. Points, M.D., Chairman of the OSMA State Legislative Committee, makes this observation: "Oklahoma medicine has the same opportunity to be influential with the new legislature as does any other group. But, in order to be effective, physicians must be willing to tell the story of medicine to those legislators back in their home districts. We must be willing to not only show up at the legislature when we are concerned with passing or killing a bill which directly affects us, but we should always be there when called on for advice, when we are concerned about an allied or paramedical piece of legislation, and any other time when we feel the testimonials of our profession can contribute to the betterment of public health for all Oklahoma."

Last Session Kept OSMA Busy

During the last session of the Oklahoma Legislature, there were 357 bills introduced in the Senate and 574 in the House. The legislature was faced with the burden of meeting large State Government departmental appropriation requests, and it finally enacted into law a budget exceeding a billion dollars for the bi-

ennium. The increase was accomplished with no new taxes.

In excess of 40 bills introduced directly or indirectly concerned the OSMA during the last session. The late Senator Louis H. Ritzhaupt provided a watchful eye where legislation affecting medicine was concerned.

In the 29th Session, the OSMA State Legislative Committee worked for passage of Senate Bill 295, which led to an appropriation of \$84,000, enabling the Board of Unexplained Deaths to have its first modest budget with which to run the medical examiners' program.

The Committee worked with the State Health Department in passing a new Health Code, and prevented chiropractors from receiving mandatory appointments on the state and county boards of health. It successfully opposed a section of Senate Bill 57, which would have prohibited a licensed physician from serving on a county hospital board of control; successfully opposed Senate Bill 212 and House Bill 683, which would have switched the administrative authority in mental institutions from doctors of medicine to business administrators; successfully opposed a section of House Bill 579 requiring mandatory licensure of all persons practicing professional nursing and invoking fines against both employee and employer if non-licensed persons practiced nursing.

Anticipated Legislation in 30th Session

Already, several pieces of anticipated legislation to be considered by the 30th Session of the Oklahoma Legislature are under review and

study by the OSMA State Legislative Committee. No one can be sure what form any anticipated measure will take until the bill is written and pre-filed. Prefiling of bills will begin on November 19th.

Certain legislative measures are anticipated by the Committee, either because of interim Legislative Council action or due to emphasis by other groups and/or state agencies. Measures under review by the Committee, at the request of the State Health Department, are:

- State Health Department may propose legislation to give the department regulatory supervision over air pollution control problems in Oklahoma;
- Extend licensure laws to municipalities of less than 3,000 population, requiring examinations and licensure of municipal sewage plant and water plant operators;
- Enactment of legislation to permit health department employees to charge fees for some visiting nurse services at the county levels, where bedside nursing care is rendered and where diagnostic and counseling services in the child guidance clinics are concerned;
- Enactment of legislation to authorize the State Health Department to close hazardous and unfit nursing homes and rest home facilities, allowing adequate notice and time to operators and owners to make prescribed adjustments;
- Legislative authority and financing for the microfilming of State Health Department records;
- Legislation to permit the State Health Department to regulate and license vending machines;
- An appropriation of \$3,588,178 to operate the State Health Department for the next biennium;
- A capital outlay of funds to construct a new State Health Department building and to expand some existing facilities. The request will amount to \$2,066,200.

Medical Examiners Act: In addition to the State Health Department

measures, the Board of Unexplained Deaths will ask the next legislature for a biennium appropriation of \$196,245 to expand the services, hire additional help and finance the state and county medical examiners system.

Moreover, an amendment is likely to be introduced by the Board of Unexplained Deaths to permit payment of travel expenses and expert witness fees for pathologists who perform post-mortem examinations and thereafter serve as expert witnesses in trial cases. Another amendment may be presented which would provide that a physician may legally hold the office of County Medical Examiner and collect fees for this service in addition to any other elective or appointive office he may hold.

Routine Testing of Newborn: The matter of routine testing for phenylketonuria (PKU) and other metabolic disorders in all newborn infants is being encouraged by the Legislative Council's Committee on Rehabilitative Services. Senator Ralph Graves of Shawnee, who is chairman of the Committee, expresses a need for such legislation, but he is presently favoring a statement of public policy rather than requiring mandatory testing of all infants.

Medical Practice Act: Resolution No. 16, adopted last May by the OSMA House of Delegates, urges the passage of legislation to establish the membership of the Board of Medical Examiners on a staggered tenure system, in order to provide the necessary continuity of experienced personnel.

The Legislative Council's Health and Welfare Committee contemplates amending the Medical Practice Act by allowing the issuance of temporary licenses to approved graduates of foreign medical schools for the duration of their resident training in state hospitals.

Mental Health: The OSMA's State Legislative Committee will have plenty of latitude to evaluate and make recommendations on measures related to mental health. This is made possible by the OSMA's statement of policy on mental health and illness referred to as "New Action

For Mental Health in Oklahoma," which was adopted by the House of Delegates last May.

The Legislative Council's Health and Welfare Committee apparently plans to introduce an amendment which would authorize admission of alcoholics to mental institutions for care and treatment. This recommendation is a result of Resolution No. 25 adopted by the OSMA House of Delegates last May, calling for similar action.

Workmen's Compensation: It is probable that several bills related to the Workmen's Compensation Laws will be introduced in the upcoming session. An OSMA committee has been appointed and has previously met with the Legislative Council's Workmen's Compensation Committee, discussing the problems arising under the law. The Committee on Occupational Medicine was appointed by OSMA President, Harlan Thomas, M.D., and the Chairman is Kieffer Davis, M.D., of Bartlesville.

In addition to the specific proposals mentioned heretofore, the OSMA Legislative Committee is studying the possible necessity for a child abuse law. If needed, the law would likely take the form of conferring immunity to doctors of medicine and other professional personnel and institutions when reporting cases involving physical abuse of children.

The association committee, moreover, has been requested by representatives of the Oklahoma Physical Therapists to consider a proposal to establish a licensing or registration board for physical therapists. The suggestion provides that approved therapists must work under the supervision of physicians.

Doctor Points made this comment with respect to the reviewing of specific pieces of legislation: "Where OSMA policy is clearly defined, the committee will act accordingly. When we review one or more proposals where the policy is not clear, such subject matter will be referred to the appropriate OSMA committee and then back to either the Board of Trustees or House of Delegates for clarification." □

Board of Trustees Proceedings

The Oklahoma State Medical Association's Board of Trustees conducted a routine business meeting on October 25th, at OSMA headquarters, Oklahoma City.

In announcing the purpose of the called meeting, President Harlan Thomas, M.D., said he planned to hold regular meetings of the Board throughout the year in order to keep the policy-making body abreast of association projects and problems.

Family Planning

The question of OSMA endorsement of family planning provoked more discussion than any other agenda item considered by the Trustees. OSMA's Maternal Mortality Committee and the Council on Public Health submitted a proposal for the association to support a cooperative program between the Planned Parenthood Association and the State Department of

Health, to institute birth control activities through the public health facilities of the state.

According to the proposal, problems of medical care and public health, as well as social and economic problems, are being compounded by the population explosion. It was recommended that birth control techniques be viewed as within the purview of preventive medicine, and the proposal also made reference to a variety of techniques acceptable to all religious faiths.

Objectives were raised by some trustees to the question of acceptance by all religious faiths, and there were further objections to classifying the problem as a responsibility of public health agencies.

The proposal was tabled by a vote of 18 to 3, on the basis that family planning counselling should remain primarily a problem to be worked out individually between patient and physician.

Reports of Councils

Another important item on the

agenda provided for progress reports from the association's six council chairmen, who are charged with major responsibilities in supervising committee work and in carrying out the association's overall program of activities.

Rex E. Kenyon, M.D., Oklahoma City, reported for the Council on Public Policy. He presented information on association activities related to the recent Medicare battle in Washington, which included sending three delegations to call on Oklahoma Representatives and Senators. Further, in this connection, he reviewed the recent AMA-OSMA sponsored public education program on existing "Health Opportunity Programs for the Elderly."

Kenyon also announced that the annual County Society Officers Conference will be conducted in January, with the program principally devoted to state and federal legislation, and public relations.

Following-up on a House of Delegates request (May, 1964), Doctor

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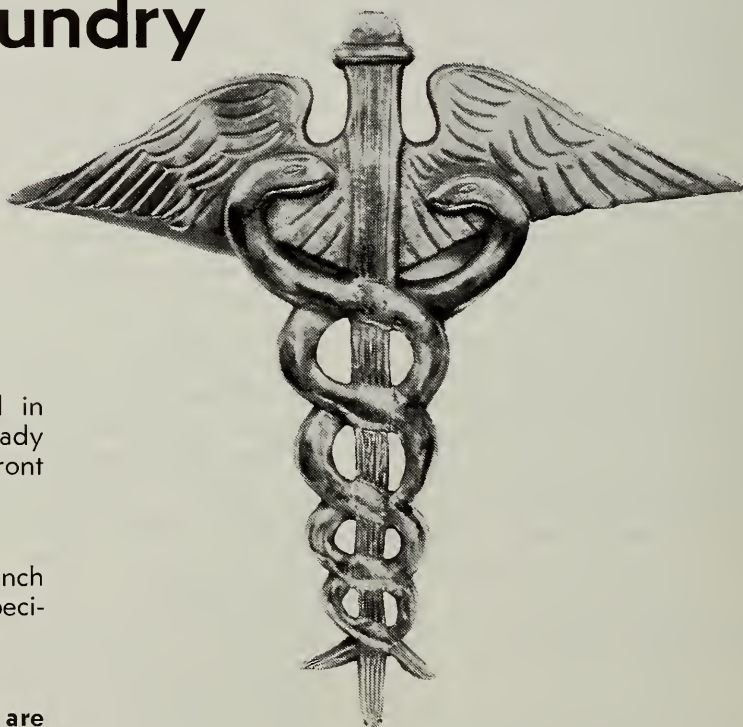
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Kenyon's council formulated rules for selecting the annual recipient of the A. H. Robins' Community Service Award. These rules are reported on page 519 of this issue of the *Journal*.

As an adjunct to Doctor Kenyon's report, Thomas C. Points, M.D., Chairman of the Association's State Legislative Committee, advised trustees of anticipated health legislation expected when the legislature convenes in January. (See report, page 510)

The report of the Council on Public Health was presented by Chairman Hayden H. Donahue, M.D., Norman. He told Trustees of his council's role in conducting the November 15th-16th AMA Regional Conference on Aging in Oklahoma City, and of continuing activities in cooperation with the Cornell Automotive Crash Injury Study.

Perhaps the most important project, according to Doctor Donahue, will be a February, 1965 statewide Congress on Mental Health, to be organized and sponsored by his council. An effort will be made to attract at least 500 participants from all sectors of Oklahoma's population.

The overall purpose of the congress will be to review Oklahoma's Mental Health Survey (see October *Journal*) in relationship to the association's broad mental health policy, "New Action for Mental Health," and to generally promote public and legislative interest in improving the state's mental health program along professionally-approved lines.

Other activities of the Council on Public Health, as reported by Doctor Donahue, include the formation and activation of a liaison committee with the State Department of Health, to conduct a year-round program on immunization education, and the publication of a reference list, or bibliography, of recommended reading on the subject of "Smoking and Health."

R. R. Hannas, Jr., M.D., Sentinel, Chairman of the Council on Professional Education, advised the Board that eight regional postgraduate education courses had been scheduled

for January through April, 1965. Subjects to be covered are "The Blood," "The Thyroid," "The Ovaries," and "The Small Intestine."

Activities of the Council on Inter-professional Relations were reviewed briefly by Chairman Orange M. Welborn, M.D., Ada. He said preliminary discussions had been held by the committees on Osteopathy and Pharmacy, and that the formulation of long-range recommendations for improved liaison were well underway. Further, he reported that program time at the County Society Officers Conference is being requested in order to discuss mutual problems with pharmacists.

The Council on Socio-Economic Activities was represented by Chairman E. M. Gullatt, M.D., Ada. He reviewed current financial problems associated with the health care programs operated by the Department of Public Welfare, and said certain recommended changes in the programs would probably have to wait until the next legislature disposed of an anticipated request for the extra funds felt necessary to maintain the present scope of benefits.

Executive Secretary Don Blair reported for the Council on Insurance. He said the relationship between the association and its approved professional liability insurance carrier had improved markedly during recent months; that the association was now being provided with excellent progress reports from the company, and that better mutual understanding of common objectives had been reached.

Joint Meeting with Blue Shield

In an unprecedented move, the association's Board of Trustees accepted an invitation from the Blue Shield Board of Trustees to meet in joint session. The purpose of the meeting will be to discuss medical economic conditions which need the attention of both organizations, and to undertake negotiations designed to promote an even better relationship between organized medicine and Blue Shield,

with the ultimate objective of providing better prepayment programs for all Oklahomans.

The date has not been set for the joint meeting at this writing, but it is expected to be held in Oklahoma City during the month of January.

Other Actions

The Board of Trustees also:

- Heard a financial report, presented by Treasurer Bob J. Rutledge, M.D., Oklahoma City, which revealed the solvency of the association with respect to the budget for the first five months of the fiscal year.
- Received a progress report from the Executive Secretary on building maintenance and improvement projects authorized by the Trustees at the July 26th meeting.
- Approved a job classification and salary schedule for staff employees, prepared at the Board's request by the Executive Secretary.
- Nominated R. M. Wadsworth, M.D., R. R. Hannas, Jr., M.D., and Charles E. Delhotal, M.D., as candidates for a single appointment to the Crippled Children's Advisory Committee to the Department of Public Welfare.
- Received a progress report from the Oklahoma Medical Political Action Committee regarding organizational and educational activities.
- Authorized Charles L. Johnson, M.D., Bartlesville, to represent the association before the Economic Security Committee of the U.S. Chamber of Commerce on December 11th, 1964, to testify against the chamber's policy favoring compulsory coverage of physicians under Social Security.

The next meeting of the Board of Trustees is tentatively scheduled for January, 1965. □

OSMA Honors Five Tulsa Physicians



Harlan Thomas, M.D., President of the Oklahoma State Medical Association (left) is seen as he presents a 50-Year-Pin from the OSMA to James C. Brogden, M.D., and James C. Peden, M.D., and Life Membership Certificates to M. V. Stanley, M.D., Robert M. Shepard, Sr., M.D., and Karl F. Swanson, M.D., (from left to right), all Tulsa physicians.

The presentation was made at the October 12th meeting of the Tulsa County Medical Society. Doctor Peden graduated from the University of Pennsylvania School of Medicine in 1914, and Doctor Brogden from the University of Maryland School of Medicine in 1914. Both entered practice in Tulsa in 1921, and both are

former Presidents of the Tulsa County Medical Society. Both Doctor Peden and Doctor Brogden are still in active practice.

Doctor Stanley and Doctor Shepard are still in active practice, and Doctor Swanson retired earlier this year.

A third Tulsa physician, Doctor Delbert O. Smith was unable to attend and a 50-Year-Pin was sent to him. He graduated from the University of Kansas in 1913 and has been in retirement for several years.

Two other doctors who were unable to attend and receive Life Membership Certificates were H. Boyd Stewart, M.D., and James O. Lowe, M.D. □

Kirkman Named Professor of Biochemistry

Henry Neil Kirkman, M.D., professor of biochemistry and associate professor of pediatrics, is serving as chairman of the Department of Biochemistry at the University of Oklahoma Medical Center until a permanent replacement for Marvin R. Shetlar, Ph.D., can be secured.

Doctor Shetlar quit the chairman-

ship and took a leave of absence as research professor to go to Indonesia as a visiting professor at Airlangga Medical School, Surabaya.

A 1952 Johns Hopkins medical graduate, Doctor Kirkman came here in 1959 from the National Institute of Arthritis and Metabolic Diseases.

He is a Markle Scholar and a 1963 National Institutes of Health research career development award winner, the latter based on his investigations of hereditary enzymic defects. □

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OKLAHOMA RURAL ELECTRIC COOPERATIVES

Dennis, Points Honored By Central State College

Two Oklahoma City physicians, members of the staff of the University of Oklahoma Medical Center, received the Central State College Distinguished Former Student Award during Homecoming activities October 17th.

James L. Dennis, M.D., dean and director of the OU Medical Center, and Thomas C. Points, M.D., associate clinical professor of gynecology and obstetrics at the school, were



JAMES L. DENNIS, M.D.

chosen by the Central State Alumni Association to receive the awards.

Doctor Ann Coyner, executive secretary of the association, said the men were selected on the basis of their contributions to the field of medicine and their contribution to Central State.

Doctor Dennis took over his new administrative duties at the OU Medical Center September 1st after serving as associate dean of the University of Arkansas medical school.

A pre-medicine student at Central from 1932-36, Dean Dennis received Bachelor of Science and Doctor of Medicine degrees from the University of Oklahoma. He served as president

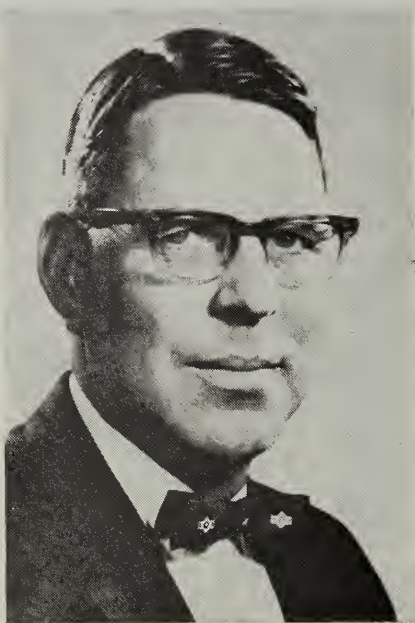
of his class in 1940 when he graduated from the OU medical school.

An intern in Alameda County, California, the dean did his resident work in pediatrics at the University of Texas Medical Branch in Galveston.

After time out for service as Navy lieutenant in the South Pacific, Doctor Dennis went to the University of Arkansas medical center in 1962 where he was associate dean in charge of clinical affairs and professor of pediatrics.

Among the honors Doctor Dennis has received are the John Rogers Scholarship Award from the OU School of Medicine; the Toga Honorary Professional Society from OU and the Mu Delta (honorary medical service society) award from Texas University for "outstanding contribution to student teaching and welfare."

Born in Wyandotte, Oklahoma, Doctor Points earned his BS, MD, MS, and PhD degrees from the University of Oklahoma. He attended Central



THOMAS C. POINTS, M.D.

from 1934-37 and is again closely associated with the school due to his office as a member of the Board of Regents for Oklahoma Colleges.

Besides serving on the active staff at the University Hospital, St. Anthony Hospital and Presbyterian Hospital in Oklahoma City, Doctor Points works as associate clinical professor

of gynecology and obstetrics, and assistant professor of preventive medicine at the OU School of Medicine.

He is a member of the staff liaison committee at St. Anthony's, a member of St. Anthony Hospital Medical Research Committee, and chairman of St. Anthony's Perinatal Mortality Committee. He was vice-chairman of the Department of Obstetrics and Gynecology at Wesley Hospital and serves as a member of the Intern Resident Committee at the Presbyterian Hospital.

A member of the American Medical Association's Committee on Maternal and Child Health, Doctor Points does duty as physician to the Oklahoma City Fire Department and, as such, is an official member of the Board of Chief Officers of the Oklahoma City Fire Department.

On the board of directors for the Foundation for Medical Research-Perinatal study in Philadelphia, Points also works as a member of the Maturity and Newborn Advisory Committee of the Children's Committee of the Department of Health, Education and Welfare.

He is an OSMA Alternate Delegate to the AMA, and is chairman of the association's State Legislative Committee. □

DEATH

GEORGE A. DeTAR, M.D.
1874-1964

George A. DeTar, M.D., an Ottawa county physician for more than half a century, died October 14th, 1964, in Joplin, Missouri. He had maintained his medical practice in Miami, Oklahoma, until two and a half months ago.

A native of Albia, Iowa, Doctor DeTar graduated from Barnes Medical College, St. Louis, in 1907. His practice was established in Narcissa, Indian Territory, and four years later he moved to Miami.

For his outstanding service to humanity, the 89-year-old doctor was presented an Honorary-Life Membership by the Oklahoma State Medical Association. □



Indoctrination Dinner Held by Tulsa County Medical Society

Sixteen new members of the Tulsa County Medical Society, admitted during the past twelve months, are seen above at the society's annual indoctrination dinner for new members at the Mayo Hotel, Tulsa, on Monday, October 12th.

From left to right: (front row) Harold W. Calhoon, M.D., urology; Timothy H. Dennehy, M.D., obstetrics and gynecology; Robert T. Rounsaville, M.D., orthopedic surgery; W. Pat Fite, Sr., M.D., surgery; Daniel E. Christman, M.D., anesthesiology; Hal G. Bingham, M.D., plastic surgery; and Philip D. Diggdon, M.D., urology.

From left to right: (standing) David O. Merifield, M.D., otolaryngology; Hugh C. Graham, Jr., M.D., pediatrics; Stephen J. Adelson, M.D., pediatrics; Gene H. Harrison, M.D., general practice; William G. Mays, M.D., industrial medicine; George H. Ishler, M.D., pathology; Robert G. Smith, M.D., general practice; Albert L. Shirkey, M.D., surgery; and

Daniel J. Alexander, M.D., general practice.

Doctor Fite, a veteran surgeon, continues to practice at Muskogee with offices also in Tulsa.

Not present when the picture was made were James N. Lysaught, M.D., pediatrics, and John R. Owen, M.D., radiology.

A special program at the annual indoctrination dinner featured the following guest speakers: Rex E. Kenyon, M.D., Oklahoma City, President-elect of the Oklahoma State Medical Association, speaking on "Medical Ethics"; Mr. John R. Richards and Mr. E. Lee Grigg, attorneys-at-law, speaking on "Problems of Malpractice"; Mr. Pat Hayes, certified public accountant, speaking on "Office Accounting"; and Mr. Jack Spears, Executive Secretary of the Tulsa County Medical Society, speaking on "Medical Society Services." William F. Thomas, Jr., M.D., Chairman of the Medical Precepts Committee, presided. About 110 persons attended. □

Medical Center Names First Professor of Child Psychiatry

The University of Oklahoma Medical Center's first professor of child psychiatry has assumed his duties.

He is Marshall D. Schechter, M.D., who came from Los Angeles where he had been in private practice of psychiatry and psychoanalysis since 1949.

Doctor Schechter was an associate clinical professor at the University of California Los Angeles School of Medicine. A graduate of the University of Cincinnati College of Medicine, he took residency training at Barnes Hospital, St. Louis, and the Los Angeles VA Center. He also holds the position of consultant professor of pediatrics.

He has received a research grant for \$125,000 from the Foundation for Psychiatry to make a study of mentally ill children as compared with normal youngsters. □

Areawide Planning Subject of Florida Conference

Health facilities planning and its effects on hospital care costs will be among the topics to be discussed at the First National Conference on Areawide Health Facilities Planning in Bal Harbour, Florida, November 28th-29th.

The day and one-half meeting sponsored by the American Medical Association's Council on Medical Service, will be held at the Americana Hotel immediately preceding AMA's 18th clinical convention.

Representatives of the Oklahoma State Medical Association will attend the conference. The OSMA favors voluntary planning programs, provided the association is granted equal representation with other groups on any advisory boards.

Saturday's opening session will be devoted to a discussion of planning and rising hospital costs from the viewpoint of medicine, hospitals, government, planning agencies, prepayment groups, insurance, and the consumer.

Participants include:

—J. Everett McClenahan, M.D., Pittsburgh, immediate past president, Allegheny County Medical Society.

—Philip D. Bonnet, M.D., Boston, administrator, Massachusetts Memorial Hospital.

—Harald M. Graning, M.D., Washington, D.C., assistant surgeon general, chief, Division of Hospital and Medical Facilities, U.S. Public Health Service.

—Samuel S. Long, Toledo, Ohio, executive secretary, Hospital Planning Association of Greater Toledo.

—James M. Ensign, Chicago, director, Professional Relations, Blue Cross Association.

—Walter M. Foody, Chicago, vice president, Continental Casualty Company.

—Nathan J. Stark, Kansas City, Mo., director of manufacturing, Hallmark Cards, Inc.

Panel moderator will be George Bugbee, Chicago, director, Graduate

Program in Hospital Administration, University of Chicago.

A contrast in regional planning between New York and California will be discussed at Saturday afternoon's session.

Presenting the New York view will be Norman S. Moore, M.D., Ithaca, chairman, Hospital Review and Planning Council of New York; Jack C. Haldeman, M.D., New York, president, Regional Planning Council of Southern New York; Francis W. O'Donnell, Buffalo, president, Medical Society of the County of Erie. Waring Willis, M.D., Bronxville, president-elect, Medical Society of the State of New York, will serve as panel moderator.

Regional planning in California will be discussed by Malcolm H. Merrill, M.D., Berkeley, director, California State Department of Public Health; Martin A. Paley, San Francisco, executive director, Bay Area Health Facilities Planning Association; Edward H. Crane, Jr., M.D., past president, Los Angeles County Medical

Society and a member of the Southern California Planning Committee. Panel moderator will be John M. Rumsey, M.D., San Diego, chairman AMA's Committee on Medical Facilities.

Saturday's concluding speaker will be Robert B. Throckmorton, L.L.M., AMA's general counsel who will discuss health facilities planning legislation.

Sunday's session will be devoted to the concept of the community as the center of planning with a discussion of the areawide planning process, measurement of need, and community self-determination.

Speakers will include:

—Robert M. Sigmond, Pittsburgh, executive director, Allegheny Hospital Planning Association.

—Edward A. Lentz, Columbus, Ohio, assistant executive director, Columbus Hospital Federation.

—Dean W. Roberts, M.D., Bethesda, Maryland, executive director, National Commission on Community Health Services. □

D. W. Humphreys, M.D., Honored



In an August 5th meeting of the Payne-Pawnee County Medical Society, D. W. Humphreys, M.D., Cushing physician, was presented an Oklahoma State Medical Association 50-Year-Pin in recognition of his loyalty to his profession. Presentation of the pin was made by W. N. Davidson, M.D., President of the county society.

Pictured at the meeting held in the Cushing Country Club are left to right (front row): James D. Martin, M.D., George Gathers, M.D., Doctor Humphreys, Doctor Davidson, C. W. Moore, M.D., and J. W. Martin, M.D. Shown in the back row (left to right): E. O. Martin, M.D., Powell Fry, M.D., G. R. Smith, M.D., W. O. Davis, M.D., O. W. Starr, M.D., C. M. Bassett, M.D., and E. M. Thorp, M.D.

OSMA Community Service Award

Beginning with the 1965 annual meeting, an Oklahoma physician will be presented with a Community Service Award each year at ceremonies to be incorporated into the Inaugural Banquet.

Rules governing the new award were approved by the OSMA Board of Trustees at its October 25th meeting in Oklahoma City. At the request of the association's House of Delegates last May, Doctor Rex Kenyon's Council on Public Policy was instructed to draft rules for participating in the community service project which is sponsored nationally by the A. H. Robins Company, Inc.

Robin's role in the activity will be to supply a handsome plaque for presentation to the physician selected by the association for his outstanding contributions in civic, cultural or general economic areas. The drug company will take no part in the selection, and the plaque will contain no reference to the firm.

According to Richard A. Velz, Director of Public and Trade Relations for Robins, the purpose of the program is "to build the community service image of the physician on a national basis."

With Oklahoma joining in the program, the award is now presented by the medical societies of twenty states, as well as Mexico, Puerto Rico, and the Canal Zone.

A recent well-known recipient of the award was Edward R. Annis, M.D., Past-President of the American Medical Association, who was accorded the honor by the Florida Medical Association.

Rules Outlined

The rules of participation, as presented by Doctor Kenyon to the Board of Trustees, are as follows:

1. The awardee must be an active member of his component society.
2. The service should have been performed voluntarily and should have benefitted the local or state

community in a civic, cultural or general economic sense.

3. The service recognized must be entirely separate from purely professional achievement in research and scientific endeavor.

4. The service need not have been a single achievement.

5. The nominee for the award must be chosen by his component society.

6. On or before January 1st of each year, the Executive Secretary of the Oklahoma State Medical Association will notify the President of each component society to the effect that nominations will be received for the award.

7. Nominations must be received in the office of the OSMA not later than March 1st, of each year, in order to allow sufficient time for selection, engraving of the plaque, and notification of interested persons.



8. The President and immediate Past-President of the OSMA, with the Executive Secretary, and two members of the Council on Public Policy, will serve as the selection committee.

9. The award will be presented at the banquet held in conjunction with the Annual Meeting of the Oklahoma State Medical Association.

At the present time, the Executive Secretary is preparing an instructional packet to be mailed immediately to county medical society presidents. It is hoped that all county societies will participate. □

Tucker Named AOA President

Richard Paul Tucker, Tulsa, this fall was named president of Alpha Omega Alpha honor medical society at the University of Oklahoma School of Medicine.

He was one of four fourth-year students elected to membership this year. Others are Thomas Russell, Meeker, first vice president; Michael Barkett, Oklahoma City, second vice-president, and Stanley Skaer, Augusta, Kansas.

AOA's fall lecture November 3rd was presented by Victor A. McKusick, M.D., professor of medicine and chief of the Division of Medical Genetics at Johns Hopkins University School of Medicine, Baltimore, Maryland. □

Medical Center Names New Pathology Professor

George Justice Race, M.D., Dallas, has been appointed professor and chairman of the Department of Pathology at the University of Oklahoma Medical Center, effective January 1st.

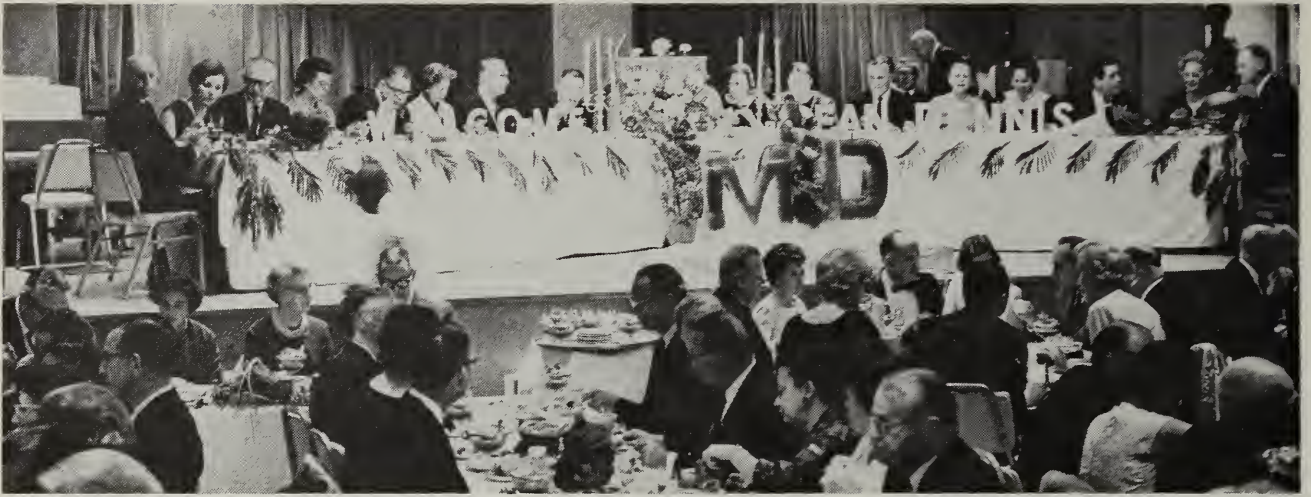
Doctor Race is clinical professor of pathology at Southwestern Medical College and pathologist-in-chief at Baylor University Medical Center.

He will replace William E. Jaques, M.D., professor of pathology, who quit the chairmanship July 1st and plans to resign from the faculty next July.

The new chairman, a 1947 graduate of Southwestern, took a pathology internship at Duke University Hospitals and a surgical internship at Boston City Hospital. After Air Force duty in Korea, he returned to Duke in 1951 for two years of residency training in pathology.

He taught at Duke and Harvard before joining the Southwestern faculty in 1955. He is also professor of microbiology at the Baylor University Graduate and Dental Schools. □

Alumni Association Honors Dean Dennis



Three hundred doctors and their wives, and leaders of higher education, rolled out the Big Red Carpet of Welcome for the new Dean and Director of the University of Oklahoma School of Medicine and Center, James L. Dennis, M.D., Sunday, October 25th in Oklahoma City at a banquet sponsored by the Medical Alumni as the main event of its annual meeting. Doctor graduates of O.U. and those of the nation's other medical schools (now practicing in Oklahoma) were about evenly divided among those attending.

Johnson Predicts Medicare Approval

The Johnson Administration has placed so-called medicare at the top of its legislative program for 1965.

In a policy paper issued a few days before the national elections, President Johnson said:

"First we must provide adequate hospital and nursing home care for our senior citizens by a sound program financed through contributory social insurance. I pledge that the legislation to accomplish this will head my program next year."

Administration forces in Congress expressed confidence that most of Johnson's legislative program would be approved next year in light of the Democratic victory in the elections. Democrats gained a net of 37 seats in the House. However, Medicare opponents have not conceded that the Administration can obtain an affirmative vote from the House of Representatives.

The Administration was reported to be considering a program that would be financed by a separate employer-employee tax rather than an increase in the social security tax as called for in legislation that died in a House-Senate conference committee when Congress adjourned in October.

In reiterating his opposition to social security financing, Rep. Wilbur D. Mills (D., Ark.), chairman of the Ways and Means Committee, said just prior to adjournment:

"I think one of the difficulties that has actually impeded the reaching of a sound solution is the insistence by the proponents of medical care on proceeding toward a solution through the existing OASDI (Social Security) system rather than in an all-out effort to solve the problem itself with some flexibility in their approach. In other words, there may well be within our reach solutions to the admittedly difficult and increasing problems of medical care for the aged which lie outside of attaching a Federal program to the framework of the OASDI insurance system . . .

"I would be hopeful that the basic prepayment concept might lead us in the direction of sound approaches to this matter. There are other principles which we can embody to insure a sound medical program while at the same time preserving our basic social security insurance system."

Other points listed in Johnson's policy paper on health were:

"Second, we must step up the

fight on mental health and mental retardation.

"I intend to ask for increased funds for research centers, for special teacher training, and for helping coordinated state and local programs.

"Third, we must expand our program to help train the doctors, dentists and technicians this nation desperately needs. Right now, the statistics show that we are importing interns and resident physicians from other countries which can ill afford to lose them.

"Fourth, we must enlarge programs to help disabled citizens rehabilitate themselves for useful employment.

"Fifth, we must increase existing programs of medical assistance to children of low-income families.

"Sixth, we must work to correct the deficiencies of young men who are rejected for military service because of health.

"Seventh, we must move ahead in the effort to protect the purity of the water we drink and the air we breathe. Air pollution, according to one estimate, causes \$11 billion damage each year to property alone. No one can measure the damage to our children's lungs." □

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The clear and consistent therapeutic benefits of Pro-Banthine (propantheline bromide) have made it the preferred anticholinergic for the past decade.

During that time, many compounds have been developed and proposed as alternatives. In the appraisal of Roach¹ "... few, if any, have seemed to offer a distinct improvement..."

Early investigations showed that Pro-Banthine (propantheline bromide) reduces motility and acid secretion and may be used in a wide range of dosage, to bring prompt, positive anticholinergic benefits to patients with peptic ulcer, spastic colon, pylorospasm and related gastrointestinal dysfunctions.

Recent evaluations sustain these earlier judgments. In a current authoritative assessment based mainly on the factors of potency, superiority to atropine, clinical experience and physiologic study, Steinberg and Almy² select as the first two preferred anticholinergic drugs, methantheline [Banthine] and propantheline [Pro-Banthine].

The name Pro-Banthine (propantheline bromide) sets a stamp of therapeutic authority on any anticholinergic prescription.

Side Effects and Precautions—Urinary hesitancy, xerostomia, mydriasis and, theoretically, a curare-like action may occur. The drug is contraindicated in patients with glaucoma or severe cardiac disease.

Dosage—The usual adult dosage is one tablet of 15 mg. with meals and two at bedtime; this amount may be doubled or tripled for patients with severe conditions. Pro-Banthine (brand of propantheline bromide) is supplied as tablets of 15 mg. and, for parenteral use, as serum-type ampuls of 30 mg.

SEARLE

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Research in the Service of Medicine

1. Roach, T. C.: Therapy of Peptic Ulcer, J. Louisiana Med. Soc. 115:136-139 (April) 1963.
2. Steinberg, H., and Almy, T. P., Drugs for Gastrointestinal Disturbances, Chapter 21, in Modell, W. (editor): Drugs of Choice—1964-1965, St. Louis, The C. V. Mosby Company, 1964, p. 343.

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Miscellaneous Advertisements

BIG SAVINGS on "Returned-To-New" and surplus equipment. Reconditioned, refinished, guaranteed, X-Ray, examining tables, autoclaves, ultrasonics, diathermies, or tables, or lights, and more. Largest stock in the Southwest. **WANTED**: Used Equipment. TeX-RAY Co., 3305 Bryan, Dallas. (Open to the profession Wednesdays, Thursdays, 9-5. Other hours by arrangement.)

PHYSICIAN needed to fill immediate vacancy. Opportunity to obtain considerable surgical experience. Compensation commensurate with experience, training and initiative displayed. Inquiries held confidential. Contact Key O, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

LOCATION WANTED: Oklahoma graduate, age 31, married, military obligation fulfilled, general practice experience. Will complete general surgery residency June 1965. Desire group or partnership practice. Contact Key G, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

GENERAL practitioners and internist needed for new medical center in fastest growing section of Albuquerque — 30,000 population/physician, at this time. A new area with good income, stable. Other physicians well established after six months practice. Contact John M. Casebolt, M.D., 9809 Candelaria, N.E., Albuquerque, New Mexico.

COUNTRY estate location — near Edmond, 160 acres on paving, rolling but smooth, lake, some timber one side, well fenced, no buildings, area increasing rapidly, some minerals. Make nice country home. Call Ray Coyner, broker, PL 4-0757 or PL 4-3685, Edmond.

GENERAL physician needed for institutional work. Excellent working conditions in new facility. Pay \$1,000 to \$1,240 month, with opportunity for future salary advancement. Forty-hour week. Write Key J, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

GENERAL practitioner desires to relocate. O.U. graduate, 28-years-old, would consider any size community on small investment, salary or percentage-type basis. Contact Key S, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

FOR SALE: All professional office equipment including, GE Cardioscribe, ultra-violet lamp, McKesson waterless metabolator, ophthalmoscope, cystoscope. Many small instruments. Laboratory equipment and GE X-Ray unit with complete dark room accessories. Contact A. S. Nuckols, M.D., 211 N. Sixth, Ponca City, Oklahoma. Phone ROgers 5-4330.

OFFICE SPACE: New, modern office building, located at 4700 N.W. 23rd, Oklahoma City, available for one or two physicians in 120 days. Across street from major shopping center, ample off-street parking. Contact Earl F. Malherbe, Jr., 4210 N.W. 39th, WI 3-3342.

IDEAL opening for young doctor in well-established medical clinic, sharing reception room and equipment with three other doctors. Wonderful location on North May Avenue, Oklahoma City. Contact Frank D. Thompson, 3115 N. Pennsylvania, Oklahoma City, JA 5-5700 or JA 4-9552.

FOR SALE: Riding, Briggs-Stratton lawnmower with roller. Call Mrs. Peter E. Russo, VI 3-4953, Oklahoma City.

WANTED: Physician, one of three, in the industrial department of a 14-man mixed specialty clinic. Should have two years hospital training. Salary is open and there is a partnership opportunity available. Contact Hays R. Yandell, M.D., 2020 S. Xanthus, Tulsa, Oklahoma.

EXCELLENT general practice opportunity in Western Oklahoma. Partnership. Contact Key B, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

RESIDENCIES AVAILABLE. January 1st and July 1st, 1965. Internal medicine three years, surgery four years, general practice two years. American physicians preferred. Co-operative medical center of five private hospitals (1300 beds), large outpatient center (50,000 annual visits), and research laboratory. Total complement of 40 interns, 30 residents, and seven Directors of Medical Education. Stipends and benefits are equivalent to \$6400-\$8200. Write Doctor W. R. Miller, Medical Director, Saint Paul Medical Center, 279 Rice Street, Saint Paul, Minnesota 55102.

WANTED: General practitioner with family to join internist and general surgeon, fully accredited 40-bed hospital and adjoining clinic in Southwest. No investment required. Salary open. Contact Key L, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

Although the Okmulgee County Auxiliary Chapter is not very old or large, it has furnished many high officers for the Women's Auxiliary to the Oklahoma State Medical Association. From 1901 to 1911, Mrs. Wilbur G. Little from Okmulgee was president and from 1911 to 1912 Mrs. W. C. Mitchner was state president. During those years Mrs. William Cott was state treasurer and Mrs. F. M. Morton was state corresponding secretary.

The Okmulgee county group has always alternated their monthly meetings between Okmulgee and Henryetta. These towns are fifteen miles apart.

A charter was granted to the Okmulgee County Medical Auxiliary on September 21st, 1955. There were 13 charter members. From the beginning, "Doctor's Day" was observed with personal cards of appreciation and red carnations being sent to each doctor. Donations were always sent to AMA-ERF and Nurses' Loan Fund. The Okmulgee chapter has been able to raise over five hundred dollars for these two funds.

Each year the rural and mental health programs have been stressed by special lectures and film parties have been held for mentally retarded children in the Enid school and gifts are sent each year to this school and also for the patients at the hospital in Vinita.

The Community Service Committee has worked each year to see that *Today's Health* is placed in the public libraries and the public schools. Donations for Christmas baskets for the needy have been made every year. This committee has also supplied candy for the Girl Scouts, and sent a collection of books to the Arizona Indian Mission. The county members assembled hundreds of campaign kits for the Heart Fund drive, and handled the publicity for the 1962 Oral Polio Vaccine

Drive. They also volunteered many hours of work on "Vaccination Sundays."

The Okmulgee group is working hard now gathering information on medical legislation and getting it before the public. They also work every year on World Medical Relief and have sent a total of 225 pounds of medical supplies to this organization.

The Civil Defense Committee has been very active. A recent program on nuclear warfare was presented by Doctor Cleve Beller to the county meeting. The chairman of the safety committee has distributed 300 pamphlets on the use of firearms. Each year interesting films and fire prevention programs have been given by the local fire chiefs.

Both Henryetta and Okmulgee members are interested in Health Career Recruitment and arranged transportation for 19 high-school students to the Spring Rally Day in Oklahoma City.

The final yearly meetings are Guest Day Luncheons. These meetings promote a friendly feeling for the medical auxiliary in the community and the programs are interesting and worthwhile. Last spring, Doctor T. C. Alexander spoke on his life as a doctor for twenty-five years in Arabia. He displayed many objects of art and native costumes which he had collected.

The 1964 membership of the Okmulgee chapter is 14.

Mrs. David Owrey, Comanche-Cotton County Medical Auxiliary historian, reports that their chapter was organized in 1949. At this time Mrs. Neil Woodward, state president, Mrs. Clinton Gallaher, state president-elect, and Mrs. Joseph Kelso, Southern president, joined in making this organization possible. Mrs. Fred T. Fox of Lawton was the first president. □

The National Democratic Platform contains the following plank concerning health care:

"The health of the people is important to the strength and purpose of our country and is a proper part of our common concern.

"We hold firmly to the conviction, long embraced by Democratic Administrations, that the advancing years of life should bring not fear and loneliness, but security, meaning, and satisfaction.

"In a nation that lacks neither compassion nor resources, the needless suffering of people who cannot afford adequate medical care is intolerable.

"The Social Security program, initiated and developed under the National leadership of the Democratic Party and in the face of ceaseless partisan opposition, contributes greatly to the strength of the Nation. We must insure that those who have contributed to the system shall share in the steady increase in our standard of living by adjusting benefit levels.

"We will continue to fight until we have succeeded in including hospital care for older Americans in the Social Security program, and have insured adequate assistance to those elderly people suffering from mental illness and mental retardation.

"Enhance the security of older Americans by encouraging private retirement and welfare programs, offering opportunities like those provided for the young under the Economic Opportunities Act of 1964, and expanding decent housing which older citizens can afford.

"We will go forward with research into the causes and cures of disease, accidents, mental illness and mental retardation.

"We will further expand our health facilities, especially medical schools, hospitals, and research laboratories."

Medical care plans in Canada may present a preview of problems to come in the U.S.: In Saskatchewan Province, the controversial government-run health program inaugurated in 1961 has been increasing at the rate of 22 per cent a year. Family rates were raised recently from \$26 annually to \$46, and these direct taxes finance only one-fourth of the actual costs, the balance coming from general revenue taxes. In September, the British Columbia doctors cut their fees for old folks and the chronically ill because their own doctor-operated insurance plan was in the red. They are trying to stave off a government-controlled plan by initiating their own solution to the problem. In Alberta Province, the provincial government subsidizes health insurance premiums for insurance companies, but there is talk of increasing the tax subsidy to expand the program. Recently, in the Province of Quebec, the College of Physicians and Surgeons recommended that the government provide a health insurance plan for all persons, without consideration for their health, wealth, or age. The medical group said the cost would be \$5.25 monthly for a single person and \$13.25 for a family. No recommendation was made as to whether the government should offer the program, or simply subsidize private insurance companies. Complicating the picture even more, last June, a royal commission, working on the problem of medical care costs for all of Canada, recommended that the federal government pay for all hospital bills, doctor bills, drugs and all dental and optical care for children up to 18 years old.

MEETINGS

November 29-December 2 American Medical Association, Miami Beach, Florida

What's Happened to Scientific Papers?

THE LEAN and lank look of *The Journal* this month is not the result of an austerity policy designed to compensate for the desertion of some advertisers. Instead, our colleagues and cohorts, the men who submit scientific papers for publication in *The Journal*, have been resting on their laurels by the hundreds lately. In fact, the editorial committee has received such a few precious papers for consideration of publication that we have had to begin strict rationing in order to maintain a scientific section in *The Journal*.

Scientific papers do not simply materialize on a typewriter, they must be written. Good intentions or promised papers can't be printed. Of course writing is no easy job; it requires work but the effort is justified because the man who writes the paper usually learns as much from preparing it as his readers do. Nearly every doctor owes it to himself, his patients and his colleagues to write a paper occasionally on some area of medicine that particularly interests him. A good scientific paper does not need to be long and ponderous with a long series of cases accompanied by statistical analyses and exotic laboratory data. Richard Bright's classic monograph on nephritis, for example, was merely a condensation of what he had learned through experience and his five senses. Even single case reports can be excellent educational exercises for the doctor-writer as well as his readers. If even one per cent of the "interesting cases" that every doctor sees during his practice were recorded, the wealth of knowledge would be vastly increased.

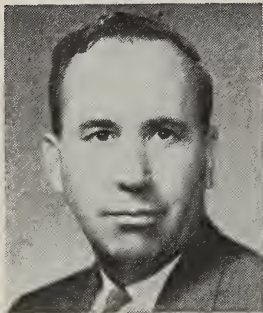
Among the ranks of doctors in private practice there are occasional references to the "ivory tower doctors" which carries with

it an implication that such men, among other things, have time to hibernate in a secluded office and dash-off papers. There is a feeling in certain quarters that men who have time to write papers don't have time to see patients. Yet these same complainers depend on current medical literature to keep them abreast of the times.

Man can read too much, they can write too much, or they can practice too much. To understand medical papers properly a man should write one of his own occasionally. He may be the epitome of eloquence when delivering a paper before his County Medical Society or in discussing some problem at a convention but he grows numb with fright at the thought of submitting his "absolute convictions" for publication. A limited medical library is no reason to limit research into a particular problem, because the American Medical Association in Chicago will send reprints of all pertinent medical papers on request.

Another excellent source of copy for *The Journal* should be the countless local meetings during the year where good papers are presented. It is a pathetic waste of time and talent that more of these are not submitted to *The Journal* for study by everyone as well as for review by those who had the good fortune to hear them.

The doctors of Oklahoma take a justified pride in their state and its medical association. In many ways *The Journal* should reflect such enthusiasm and acumen. Oklahoma has the medical talent and *The Journal* should be first choice among Oklahoma doctors when submitting papers for consideration of publication. Unless more scientific papers become available to *The Journal* it cannot maintain one of its primary functions, namely that of publishing the papers written by its members or delivered at various medical meetings. The choice is up to you kind readers and, we hope, generous writers.—C. B. Dawson, M.D. □



Most of our holidays relate to an emphasis on some spiritual dimension of living. Thanksgiving tells us of man's need for gratitude; Easter affirms the triumph of spirit over flesh, the Fourth of July reminds us of man's eternal yearning for freedom, and Christmas celebrates the new life that is available to the world through faith. Christmas celebrates new life, new faith, new possibilities.

Every physician knows the experience of helping to bring new life into the world. This experience is never old, never routine, and never without its deeper meaning. Every babe that arrives is a bundle of possibilities for good or ill. In each one there is a divine potential or the possibility of just the opposite. Every little child is a piece of unclassified humanity and comes into the world with a chance either to make a real contribution to the world or to become one whose life is a problem to society.

The children that are born into this world do not choose to come here. They do not create the environment into which they are born and they do not arrive with built-in prejudices, hatreds and resentments, but un-

fortunately, these they may learn as they grow.

When Jesus was born in Bethlehem of Judea the world was full of hatred. The iron rule of a dictator-aggressor was fastened on the land. Exploitation, fear and callousness were the order of the day and the common life of most everyone had reached a bestial level. But this one man began to change everything, and in a few short years—not quite thirty-three to be exact—there were folk who were ready to have hope. They were following a new life. They had found a good way. They had discovered stronger faith. At the manger in Bethlehem a life had been born that has changed the lives of millions.

At Christmas time the thoughtful person will examine himself to see whether his own example and influence is worthy of being imitated and followed by little children. At this sacred season every thoughtful person tends to reflect upon that for which his own life may count and he asks himself if he is helping to construct an environment and a life that can produce hope and growth and dignity for others.

Christmas says new life is possible and it is available to everyone.

Season's greetings.

Harlan Thomas M.D.

The Neuroanatomy of Recent Memory

RICHARD P. TUCKER, MS III

Recent memory loss is so frequent that its finding is almost synonymous with organic brain damage. However, certain specific brain lesions can produce severe memory loss with no other deficits.

MAN EXCELS his fellow creatures on this planet in few ways. He runs poorly, swims only with practice, does not fly at all without help, and is weak for his size. He depends for survival on an advanced central nervous system and on the tools, his hands, to carry out his nervous system's directions. His nervous system receives and records information and then can use this information at some later time. The capacity to store and recall information is memory. Memory has been long thought to be some abstract concept such as personality or soul. While memory was clearly a brain function it was felt to involve the entire brain. Indeed it probably does, but some aspects of memory have

been demonstrated to have a fairly specific neuroanatomical substrate. The purpose of this paper is to examine this substrate.

THE CHEMISTRY OF MEMORY

Memory involves the tendency for electrochemical conduction through neuron pathways to be facilitated upon successive stimulations. This occurs at all so-called levels in the nervous system. The postural reflexes involved in walking rely on a form of memory although this memory seldom reaches a conscious level. In his book on memory Russell notes that Eccles demonstrated an increase in the size of synaptic knobs after successive stimulations.¹ The actual biochemical substrate for recording information has been proposed by some to be ribonucleic acid or RNA. McConnell at the University of Michigan discovered that planaria who had eaten ground fellow planaria already conditioned to a stimulus, could be more readily taught to respond to that stimulus. This was thought due to RNA.² The RNA molecule is capable of storing 10^{15} bits of information.³ In 1961 Holger Hyden described how he was able to dissect out single nerve cells under a microscope with a steel instrument and dissect off neighboring glial cells. He analyzed the RNA content of the

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nerve cells with ultraviolet spectrophotometry. He showed that neurons contain more RNA than other body cells and that this RNA content could be increased in rat vestibular neurons by teaching the rats to balance themselves.⁴

Recently Cameron has extended this fascinating knowledge to practical use in man. RNA was given orally and later parenterally to aged persons with memory defects. Their pre-treatment and post-treatment scores on a Wechsler memory scale showed good improvement in arteriosclerotic disease, with less improvement in the pre-senile and senile dementias.⁵ Arteriosclerotic and senile dementias are nearly as common as old age itself.

This entire concept of RNA as the biochemical basis for memory was questioned by Gaito in 1963, who felt that the evidence for RNA is inconclusive and that RNA's lability would make it unsuitable for the long storage of information which occurs. He discussed DNA as a basis and felt that it too was unsuitable because of its great lack of lability and its inability to be modified by anything other than strong mutagenic agents.²⁹ It may be that RNA records recent events and that this information is somehow transferred to DNA. There is still much to be learned about this area.

NEUROANATOMY

In 1937 Papez proposed a neuroanatomical basis for emotion. This consisted of the hippocampus, the fornix, the mammillary body, the mammillothalamic tract, the anterior thalamus, the medial thalamocortical radiation, and the cingulate gyrus. He termed this pathway the "stream of feeling." His anatomic descriptions were very detailed. For example, he described how the fornix ends chiefly in the lateral part of the medial mammillary nucleus and how the medial part gives rise to the mammillothalamic tract, which is joined then by fibers originating in the lateral mammillary nucleus.⁶ Although Papez was not proposing a basis for recent memory, it is interesting that he very accurately describes what many consider now to be such a basis.

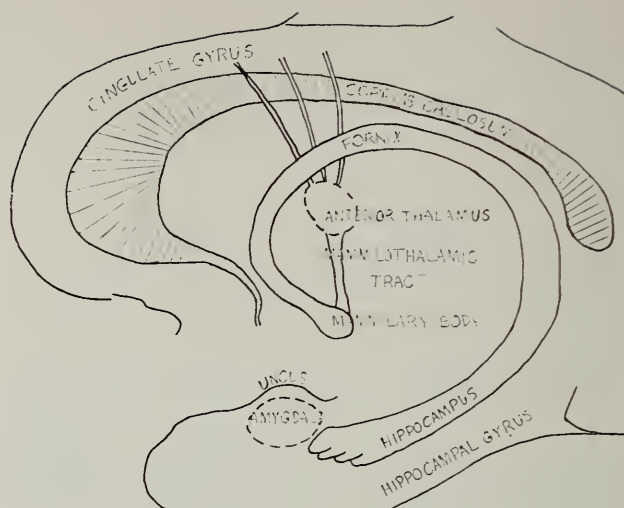


Figure 1. Modified from A. T. Rasmussen
The Principal Nervous Pathways, IV

MAMMILLARY BODIES

Korsakoff, a Russian psychiatrist, described in 1887 a condition characterized by the triad of amnesia, confabulation and disorientation. In 1896 Gudden described mammillary bodies at autopsy which showed degenerative changes but it was not until 1928 that Gamper correlated these pathological changes with Korsakoff's triad. The condition, Korsakoff's psychosis, is characterized by a profound loss of recent memory. A French patient of Barbizet described this condition thus: "When I watch closely I know but I soon forget. My brain feels like a sieve, I forget everything. It all fades away."⁷

Wernicke in 1881 described a disease characterized by symptoms which included recent memory loss. It has since been shown that this disease is due to a deficiency in thiamine and that Korsakoff's psychosis often occurs as a part of this deficiency disease with bilateral mammillary body pathology and loss of recent memory.

More recent studies of this condition have been made by Cravioto, *et al.*, in 1961, who described 25 autopsies in which gross or microscopic changes in the mammillary bodies existed bilaterally. By going back to the patients' records he found that all but one of these patients had been an alcoholic. The "chronic brain syndrome" with recent memory loss was described in 26, but confabula-

tion had been observed in only five cases.⁹ It is to be noted that this was a retrograde study. In the same year Victor, Adams and Collins described 50 cases of Wernicke's disease in which it was felt that lesions later demonstrated in the mammillary bodies and in the thalamus were responsible for a recent memory loss.⁸ Russell considers that the mammillary bodies are a vital part of what he refers to as the hippocampal system, which is necessary for the proper functioning of memory.¹

HIPPOCAMPAL GYRI AND TEMPORAL LOBES

The mammillary bodies connect by way of the mammillothalamic tract, or bundle of Vicq d' Azyr, to the anterior part of the thalamus, and by the fornix to the hippocampus, hippocampal gyrus and the temporal lobe on each side. According to Victor, Sanger-Brown and Schafer described an apparent memory loss in a monkey after temporal lobectomy in 1888. Victor then states that Becterev described a patient in 1890 with severe memory disturbance who had, at autopsy, bilateral softening of the uncus and of the hippocampus, that is of the medial temporal lobes.¹⁷ According to Walker, Grunthal in 1947 described bilateral lesions in the temporal structures as a cause of severe memory deficit.¹³ Victor mentions the description of Glees and Griffith in 1952 of a 58-year-old woman with severe recent memory loss who died 15 years after the onset of her symptoms and was found to have bilateral cyst-like lesions in the hippocampus and in the hippocampal and fusiform gyri. Fibers in the fornix were decreased but the mammillary bodies were intact. It was inferred that lesions involving the hippocampus and adjacent temporal lobe structures are related to lesions of the mammillary bodies, and that these structures might be part of a larger system responsible for recent memory.¹⁷

Since the hippocampal gyri are an integral part of the temporal lobes it was postulated that bilateral temporal lobectomy would produce, among other things, recent memory loss. Scoville and Milner discussed these two and seven other patients who underwent similar operations. Scoville had been hoping to find a procedure to replace frontal leucotomy in the treatment of intractable mental

illness. Five of these patients had resections limited to the uncus and the amygdala bilaterally. Although these patients showed no improvements in their psychoses, they had no recent memory loss. The remaining patients had resections which extended at least 5 cm. from the tips of the temporal lobes. These patients suffered no demonstrable neurological deficits and had no apparent intellectual impairment. One paranoid schizophrenic, an M.D., showed a post-operative I.Q. of 122, and a female alcoholic showed an I.Q. of 123. Another woman after prolonged electroshock therapy and surgery, had an I.Q. of 122. All of these remaining patients, however, showed varying degrees of memory loss. In a tenth case a nine c.m. unilateral medial temporal lobe resection for seizures produced no memory disturbance. Scoville concluded that the uncus and amygdala were not necessary for recent memory, and that unilateral hippocampal lesions produce no memory impairment.¹¹

In 1957, however, Walker reported four patients with unilateral temporal lobectomies for seizures who suffered severe loss of recent memory. These cases were not followed so completely as were some later cases. One 57-year-old lady had a pre-operative electroencephalogram which showed some abnormal activity in both temporal lobes. She suffered an apparently severe memory loss after surgery, but she refused to undergo psychological testing. In a 40-year-old man pre-operative electroencephalograms first showed bilateral involvement and then left unilateral involvement. This was his dominant temporal lobe and when it was removed for seizures he had severe loss of recent memory and some past memory. A 40-year-old woman with a berry aneurysm and a normal electroencephalogram had a severe recent memory loss after temporal lobectomy to expose her aneurysm. The last patient, a 53-year-old man, did not develop a memory disturbance until a year after surgery. These lobectomies removed from 5 to 7 cm. of the anterior temporal lobes. Walker hypothesized

Richard P. Tucker, a fourth-year student at the University of Oklahoma School of Medicine, is serving as president of the Alpha Omega Alpha.

that unilateral temporal lobectomy could produce the same recent memory loss seen in bilateral lobectomy.¹³ He did not eliminate, carefully, the possibility of a contralateral lesion.

In 1955 Milner and Penfield had also reported recent memory loss in two cases of dominant temporal lobectomy. One of these procedures involved the initial removal of the anterior 4 cm. of the temporal lobe with resultant transitory aphasia alone. The second stage, which was necessary after seizures continued, produced a recent memory loss as did the other patient's single stage operation. Both patients were able to return to their jobs, one as a draftsman and one as a glove cutter since the learning of new material was not involved.¹⁴

In 1958 Penfield described this memory disturbance in the following way: "They could retain in mind a sentence or a short sequence of numbers, provided they were permitted to keep their attention upon it, even as long as fifteen minutes if no one spoke to them. But if they turned their attention to something else, even momentarily, they might forget the previous matter completely—might even forget that there was a previous matter." He noted that unilateral temporal lobectomy ordinarily resulted in upper quadrant homonymous hemianopsia and in no other neurological deficit. He cited 90 cases of unilateral lobectomy without any memory disturbances. Milner had noted in these patients, however, a decreased ability to learn and retain verbal material if the dominant lobe was removed. She also noted that memory disturbances were greater in patients before surgery with temporal lobe seizures and a dominant focus than in those with a nondominant focus. The two cases reported in 1955¹⁴ were reviewed. Neither of these patients had developed the capacity to retain recent information but one patient was able to recall a few significant post-operative events, such as his daughter's wedding.¹⁶

Serafetinedes *et al.*, in 1962, reported 34 non-dominant temporal lobectomies. Thirty-three had improvement in their epilepsy. Seven of these 34 had contralateral electroencephalographic abnormalities. Of these

seven, six developed a recent memory loss. Only one patient, without any apparent contralateral electroencephalographic abnormality, had recent memory loss.¹⁵ The overwhelming number of unilateral lobectomies with no memory disturbance seems to indicate that any dominance that may exist in the hippocampal system's incorporation of information is slight.

In another article in 1958 Penfield described stimulation of the human temporal cortex during surgery in cases selected from 700 operations. This stimulation produced psychic states or fragments of past experiences in some patients. Some patients experienced a sort of double awareness being conscious of having experiences while being aware that they were in surgery.¹² Discharges from temporal lobe lesions have been known to lead to hallucinations involving different senses with play-back from other cortical areas.¹ In a recent article Penfield and Perot reviewed 53 patients who had what they called experiential seizures and 40 who had experiences when stimulated during surgery. They outlined areas of auditory and visual experiences carefully and noted that auditory experiences involved the superior temporal gyrus while visual experiences involved most of the rest of the lateral surface of the temporal lobe. Stimulation of Heschl's gyrus produced only sounds rather than auditory experiences.²³ Penfield referred to the temporal lobe as the interpretive cortex.¹²

Most well controlled work in research must involve animals. Stepien and his colleagues in 1960 performed experiments with five male and two female monkeys using the method described by Konorski in 1959. This ingenious method consists of comparing two series of, for example, auditory tones with one series consisting of, say, low tone, high tone, and low tone. If the second series is the same as the first, this is positive, and if different, it was negative. Interposed between the two series was a distracting stimulus which also required a response. If the monkeys responded to a positive signal, they received a reward and to a negative signal, a punishment. Their small group of monkeys was divided into three groups; group I with superior temporal ablation, group II with inferior temporal ablation and group III with

medial temporal ablation which included the hippocampal gyrus. All groups had these ablations done bilaterally. Those in group III developed some Kluver-Bucy like characteristics (orality, indifference and sexual disturbances). No groups developed general memory loss. Group I lost auditory recent memory without apparent hearing loss. Group II lost visual recent memory with no visual acuity loss. There was a significant loss of both types of recent memory in group III.¹⁸

In the same year Stepien and Sierpinski reported the use of the Konorski technique in man. In a control series of patients no recent memory loss was observed. They found no recent memory loss in 15 unilateral temporal resections. Interestingly, in one 15-year-old girl who had experienced left motor seizures and who had a preoperative recent memory deficit, no disturbance in memory was found after a partial temporal and frontal lobectomy on the right which included much of the hippocampal gyrus.¹⁹

In order to avoid recent memory loss in cases where temporal lobectomy is indicated, Milner in 1962 discussed the use of intracarotid sodium amytal injections. Fifty patients were injected, 44 on the dominant side and 46 on the non-dominant side with 200 mg. of sodium amytal. These patients were then evaluated for recent memory loss a short time after injection. This loss was found twelve times, eleven times when the lesion was contralateral and once where injection produced bilateral neurological signs.²⁰ Again this demonstrates the capacity of either side of a healthy hippocampal system to take over; incidentally it provides a useful method for confirming the laterality of lesions.

FORNIX

Between the mammillary body and the hippocampus is the fornix. Sweet, *et al.*, in 1959 reported section of the anterior columns of the fornix in a 36-year-old woman during the removal of a third ventricle cyst. Post-operatively she exhibited a prolonged retrograde amnesia which eventually shrunk to a period of several weeks, a loss of recent memory and depression of spontaneity. She also had a loss of temporal orientation.

Sweet mentioned a patient described by Welch in 1954, a 44-year-old geologist who had undergone a bilateral section of the fornix. This patient suffered a severe recent memory loss but was able to remember daily events with great effort. Sweet also noted that Guiat, in Paris, had performed two such sections with no resulting memory loss.²³

THE THALAMUS

The thalamus has connections on the other side of the mammillary bodies. Spiegel and his colleagues in 1955 described 30 patients who underwent thalamotomy for severe emotional disturbances or for intractable pain. Nineteen of these patients developed a condition termed *chronotaraxis* in which they lacked the ability to properly orient events in time sequence. This occurred particularly with ablation of the dorsomedial nuclei. These patients might intellectually "know" that they had, for example, lived in a house for five years but might "feel" that it had only been a few weeks. These conditions were all transient. No other subcortical lesions produced this condition. No recent memory loss was observed.²⁶ This lack of temporal orientation likewise was noted above in the section of the fornix bilaterally. In Cravioto's series of 28 autopsies with mammillary body changes, all of the 22 examined for thalamic changes were found to have them. Involvement was most often in the anterior nucleus with the dorsomedian and ventromedian nuclei involved to lesser degrees.⁹ In Victor's study of Wernicke's disease changes in the dorsomedian nucleus and the pulvinar were found most often.⁸

CINGULATE GYRI

The cingulate gyrus was also a part of Papez's theoretical basis for emotion. Whitty, *et al.*, described ten adequately studied patients of 14 who had undergone bilateral cingulectomies for severe obsessional states. Two of these patients showed time disorientation while eight had increased vividness of thoughts and dreams with difficulty in differentiating mental from external events. There was no recent memory loss. They seemed aware of their confusion and all recovered within three days. According to Whitty, Benedek and Judba had described the

amnesic, confabulatory state with lesions of the anterior thalamus and singulum as early as 1941.²²

TYPES OF LESIONS

Rose and Symonds in 1960 reported four cases of recent memory loss following encephalitis with some of these associated with chronotaxis. They noted cases reported after trauma by Russell in 1935 and by Symonds in 1932.²⁴ Another type of encephalitis was described by Bierly, *et al.*, in 1960 which resulted initially in recent memory loss but which terminated in dementia, coma and death. At autopsy these patients had lesions of the uncus, amygdaloid nucleus, hippocampus, dentate gyrus, limen insulae, and the hippocampal and cingulate gyri.²⁵ Victor in 1961 described in careful detail the clinical picture and pathological findings of a patient who suffered severe recent memory loss as the result of serial infarctions. The first of these produced right homonymous hemianopsia with no memory loss. The second produced left homonymous hemianopsia with severe recent memory loss and two years of spotty retrograde amnesia. The third and fatal infarction involved the brain stem. At autopsy old lesions were seen to involve both posterior cerebral arteries and in turn the mammillary bodies, fornix and the hippocampal formations. The uncus, amygdala and the terminal digitations of the hippocampus were not affected bilaterally. This patient, like others with only recent memory loss, was able to read and write and made no spatial misinterpretations.¹⁷ These serial infarctions involved chiefly the areas previously shown to be vital for recent memory and produced the expected loss.

SUMMARY OF NEUROANATOMY

It has been seen that lesions of specific brain structures produce inability to incorporate new information on a permanent basis, that is, recent memory loss. Specifically, lesions of the mammillary bodies, fornix, hippocampus and hippocampal gyrus produce such a loss. Lesions of closely associated structures such as the thalamus and cingu-

late gyrus produce a condition called chronotaxis in some patients. Cingulate lesions also have produced difficulty in distinguishing mental from external events. Other authors have reported recent memory loss with thalamic and cingulate lesions, but this is inconsistent, and it might be explained on the basis of how frequently lesions of these structures are seen concurrently with lesions of the mammillary bodies, fornix, hippocampus and hippocampal gyrus. In all cases bilateral lesions are apparently necessary before recent memory is lost. When unilateral lesions, such as unilateral temporal lobectomy, have caused recent memory loss, there has been found some evidence of a contralateral lesion most often. The uncus and amygdala apparently are not necessary for recent memory. In monkeys specific temporal lesions have been shown to cause only loss of auditory recent memory or only of visual recent memory, but such specific deficits have not been found in man.

EXCEPTIONS

We have seen too that a supposed inability to reinforce and make permanent a memory trace in a geologist with bilateral sections of the fornix, could be overcome with great effort.²³ Brain's textbook cites the case of a man unable to recall simple every day events but who was able to recall his wife's death vividly, although she died after he lost recent memory.²⁶ Nathan and Smith describe a man who died at 34, having been a somewhat lazy but sociable and intelligent person who had excelled in school. At autopsy he was found to have gross congenital deformities of this proposed system for recent memory. He had no fimbria, no fornix and no septum pellucidum. The hippocampus and hippocampal gyrus were very small while the corpus callosum was irregular and nearly absent as was the cingulate gyrus. The mammillary bodies were intact. Despite these anomalies he had functioned with no apparent memory deficit throughout his life.²⁷ Interestingly the dolphin and the Indian elephant get along very well with no mammillary bodies.²³ Perhaps in these two species the mammillary bodies are bypassed. Perhaps those who remember specific events with great effort despite apparently com-

plete recent memory loss are able to utilize some form of collateral circuit. It may be that enough of the anatomic structures remained for recent memory to incorporate new information with great effort or sufficient repetition.

COMMENT

Studies in this area show great differences in the techniques used in the mental status examination. Much of the confusion could be resolved by some more precise technique such as that described by Konorski¹⁹, or by a thorough, well standardized mental status examination. The use of such a method would lend some standardization to studies of the presence and severity of loss of recent memory. Studies on sections of the mammillothalamic tract apparently have not been carried out. Certainly such a procedure could not be done experimentally in man, but with careful surgical technique and Konorski evaluation it should be feasible in monkeys or certain other animals. To devise such a study to evaluate chronotaxis in animals would require great ingenuity.

Much remains to be done in the study of recent memory and memory in general. Recent memory is an important subject since its loss is so common and sometimes can be crippling to its victims. Indeed, the diagnosis of the so-called "organic brain syndrome" rests chiefly on the finding of recent memory loss. A patient who has completely lost the capacity to incorporate and retain new information perhaps has a more difficult time finding a place in society than one who suddenly becomes totally blind.

In attempting to localize a specific function in the nervous system one is always reminded of the unity of the system as a whole, and that no part can truly be isolated from the rest. Nevertheless, some localization of recent memory has here been shown clearly. The function of this recent memory system apparently is to convert a temporary tracing into a more permanent one. How this is done is not known presently; likewise where and how memory is stored is unknown. Probably the complete story will never be understood. What Tennyson said of his "Flower in the crannied wall" could be said at least as ap-

propriately for any specific function of the nervous system: ". . . but if I should understand what you are, root and all, and all in all, I should know what God and man is." □

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The Clinical and Physiological Role of Surface Active Materials in the Respiratory Distress Syndrome

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Recent studies have illuminated the physiological basis for the clinical manifestations in the respiratory distress syndromes. These new developments are reviewed.

IN 1903 Hocheim first reported the existence of a peculiar membrane in the lungs of two infants dying in the neonatal period.¹ Probably the initial designation of this material in the recent literature as "hyaline membranes" was by Johnson and Meyer² in 1925, who applied this Greek term meaning "glass" or "crystal" to the thin eosinophilic coating seemingly lining the terminal bronchioles and alveolar units.

Renewed interest in perinatal distress and mortality has raised new queries regarding newborn lungs. Among these new questions and problems, the respiratory distress syndrome associated with hyaline membranes and atelectasis has caused controversy among pediatricians, physiologists, and pathologists.^{3, 4, 5, 6}

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The clinical management of the respiratory distress syndrome remains a ubiquitous problem. Indeed, there is general agreement that the anatomic conditions of this syndrome cannot always be diagnosed with accuracy in the living infant.^{8, 9} There is even considerable disagreement as to what primary pathological changes constitute this syndrome.^{10, 11, 12}

Recent pathological and physiological investigations have shed new light on the etiology of some forms of the respiratory distress syndrome.^{12, 13, 14, 15} The purpose of this paper is to review the previous observations critically and to discuss the pathophysiology of the multiphasic problem of surface activity in the respiratory distress syndrome.

CLINICAL MANIFESTATIONS OF RESPIRATORY DISTRESS SYNDROME

It is usually stated that the infant with hyaline membrane disease appears normal immediately after birth unless there are associated congenital anomalies.^{16, 17} However, within two to five hours he begins to exhibit signs of cardiopulmonary decompensation,¹⁸ viz. rapid and increasing respiratory rate,^{8, 19} chest lag, retractions, chin tug, and expiratory grunting. Corroborative physical evidence includes an irregular and rapid heart rate, varying degrees of hypotonicity, cya-

nosis, and lack of response to stimulation.^{16, 19} This "quiet period" remains a controversial subject. Gellis⁶⁰ and other investigators feel that respiratory difficulties are manifest immediately from the time of delivery and that the lack of close and critical observation during this period is the reason for this apparent lag in the onset of manifestations.

It must be remembered that these signs and symptoms delineate a situation of respiratory distress in the neonate in a non-specific, nonetiologi- cal fashion. This manner of detecting the syndrome serves a useful purpose if one realizes the multiple etiologi- cal factors which may be operative, e.g., central nervous system failure due to narcosis or trauma, primary atelectasis, pneumonia, diaphragmatic hernia, lung cyst and pneumothorax.^{16, 17}

ANATOMICAL DESCRIPTION OF LUNG UNITS

a. Light Microscopy.

The functional unit of the lung is composed of all the structures, beginning with the respiratory bronchiole and extending to, and including, the alveoli with all the blood vessels, lymphatics, nerves, and connective tissue therein^{20, 21} (see illustration 1). This progressively subdividing system of respiratory tubes and passageways, i.e., the respiratory bronchiole and alveolar ducts, terminates in the alveolar sacs and alveoli (see figure 1). These tubes are thin walled, collagenous structures lined by a simple columnar and low cuboidal epithelium; polyhedral sacs open onto the surface of the respiratory bronchioles and alveolar ducts; these sacs are blind out-pouchings which are 60-80 micra in diameter and consist of single alveoli and aggregates of alveoli.

The alveoli are thin walled, polyhedral formations, one side of which is always open to the alveolar ducts so that air may diffuse freely. The supporting framework of these

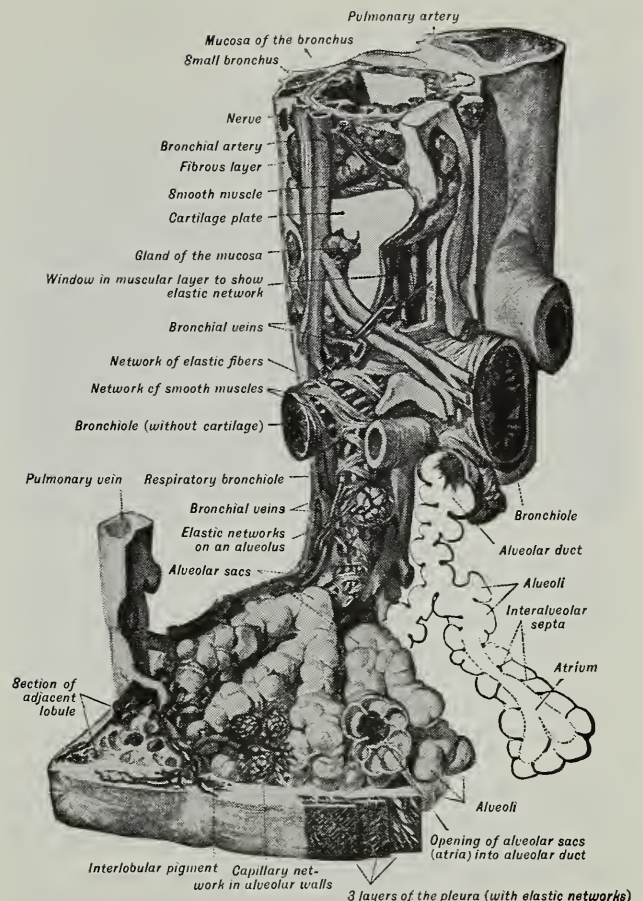


Illustration I. This stereographic representation depicts the functional unit of the lung with all the anatomical units therein. (From Bloom, W., and Fawcett, D. W.: A Textbook of Histology. Ed. 8. Philadelphia, W. B. Saunders Company, 1962, reproduced with permission of author and publisher).

structures in a closely meshed network of branching reticular fibers and occasional elastic fibers. Embedded in this framework is a single network of freely anastomosing capillaries.²⁰

b. Electron Microscopy

The previous controversy over the existence of nonexistence of alveolar epithelial cells has been mostly resolved by the electron microscopic studies of Low, *et al.*²² (see illustration II). It has been demonstrated by Low and other investigators that there is a thin, apparently continuous, cellular covering of the alveolar wall which is thicker than the capillary endothelium in most places. A thin, continuous homogeneous basement membrane separates the endothelium and epithelium; this delicate membrane separates these cellular layers in the terminal respiratory segments of the lungs. Recent studies have implicated the alveolar cellular layer in the formation of a pulmonary surface-active

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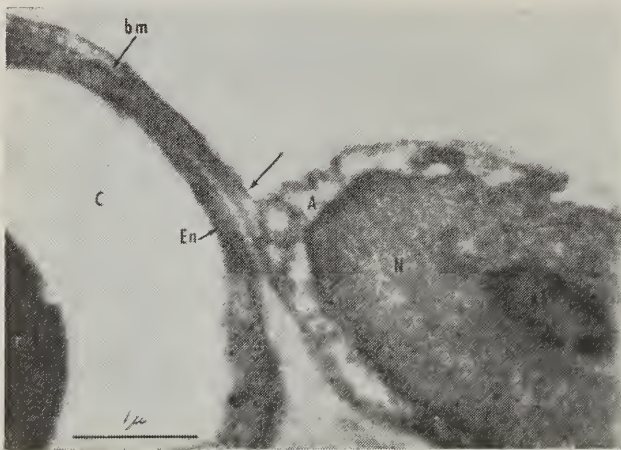


Illustration II. This electron photomicrograph by Low illustrates the presence of a homogeneous basement membrane (bm) separating the capillary endothelium (En) from the alveolar cellular layer (A). (From Low, F. M.: *The pulmonary Alveolar Epithelium of Laboratory Animals and Man*, Anat. Rec., 117: 263, 1953; reproduced with permission of author.)

agent.^{14, 15, 23} This surfactant is present in a thin alveolar lining layer which rests above the alveolar lining cells.²⁴

In the usual atelectatic lung with hyaline membranes, a diffuse homogeneous eosinophilic material is noted lining the terminal respiratory segments and is not very noticeable in the interstitial areas with light microscopy.^{7, 16, 19, 60} Gilmer and Hand²⁶ observed the presence of hyaline membrane material in a patchy distribution in a location subjacent to the basement membrane; however, in many areas the basement membrane was disrupted and the offending material was present in the alveoli as is typically noted. This focal and scattered destruction of alveolar linings has been noted by Van Breeman,¹⁷ and the discontinuity may allow an easier egress of the fibrin material or it may represent a primary pathological alteration.

PATHOPHYSIOLOGICAL ALTERATIONS IN ATELECTASIS

Any mechanism which interferes with the distribution of air to these alveoli from whatever cause may result in alveolar collapse as differential resorption of oxygen occurs in these obstructed alveoli.^{27, 28} This mechanism of loss of distending pressure gradually results in their closure or atelectasis. Once these lung units have collapsed, it has been

shown by Mead and Collier²⁹ that they tend to remain collapsed.

In order to appreciate the cardiopulmonary changes seen with atelectasis of the newborn, one must be aware of the physiological alterations which are attendant on atelectasis. In essence, atelectasis may be considered as focal or massive collapse of air-bearing portions of the lung and, as such, the total available diffusion surface is correspondingly reduced.

Pulmonary compliance (or pulmonary distensibility)³⁰ is reduced for reasons which will be discussed later. Because of this reduced pulmonary compliance, there is an increase in the work of ventilation. As a result of alveolar collapse there is a disturbed ventilation-perfusion ratio so that the collapsed alveoli do not arterialize the blood which continues to flow through them.^{28, 30} As a result, an effective right to left shunt occurs with resultant hypercapnia and hypoxemia. In samples of arterial blood from infants with hyaline membrane disease the falling pO_2 associated with impaired pulmonary ventilation and perfusion is found to be accompanied by a rising pCO_2 as respiratory acidosis increases.³¹

The systemic effects of this hypoxemia and hypercapnia are seen in neurological and cardiopulmonary manifestations of the newborn with atelectasis. The neurological effects are tachypnea, hypotonicity and lethargy. The principal respiratory drive in normal infants is usually mediated by carbon dioxide retention.³⁰ However, in these children as in other forms of hypercapnia, hypoxemia is probably the stimulating factor, causing the medullary respiratory centers to respond with an increase in the respiratory rate.³² Changes in consciousness and muscle tone are frequent in hypoxemia and reflect a relative deficiency of oxygen supply to the higher centers.^{8, 17} Another cardiopulmonary alteration is cyanosis which is usually just a reflection of increased amounts of reduced hemoglobin in the blood; compensatory mechanisms of erythrocytosis as seen in adults³³ are rarely seen in neonates due to the lack of time for their development. The cardiovascular changes are usually a rapid, irregular heart rate due to increasing hypercapnia and its effect on the medullary and carotid body regulatory centers. The cardiac

manifestations associated with the idiopathic respiratory distress syndrome are in some dispute. Burnard³⁴ has reported the presence of systolic murmurs, presumably associated with a patent ductus arteriosus. The studies of Rudolph, *et al.*,⁶¹ seem to corroborate the clinical observation of murmurs of a patent ductus arteriosus in these distressed infants. They found that in infants with severe respiratory distress the most striking catheterization finding was the presence of a widely patent and functioning ductus arteriosus. The physiological significance of this finding however has not been established and may represent only the response of the ductus to hypoxia.⁶² Burnard has also reported roentgenographic evidence of increasing heart size, although enlargement has been reported in asphyxia after term deliveries without hyaline membrane formation.³⁵ Although insufficient catheterization data have been reported to comment on the intrinsic pulmonary vascular changes seen in the neonate, some degree of systemic and pulmonary hypotension has been reported by Neligan and Smith³⁶ as an early feature of this syndrome.

EFFECTS OF SURFACE PHENOMENA ON PULMONARY FUNCTION

In order to appreciate the effect of surface tension as it is related to pulmonary physiology, it is important to understand certain physical concepts about fluids and interfacial tensions.

Under motionless conditions, a molecule in the interior of a liquid is under intermolecular attractive forces of a van der Waals' type from all directions: the vector sum of these forces is zero. A surface molecule, however, is pulled inward in a direction perpendicular to the surface since there are no attractive forces opposing this force (see figure 1). Thus, it requires work to move molecules to the surface against this opposing force, and surface molecules thus have more potential energy than interior molecules. The potential energy of these surface molecules is reflected in surface tension which can be expressed in dynes per square centimeter of surface.³⁷

The forces of surface tension apply to any liquid surface in contact with air. This sur-

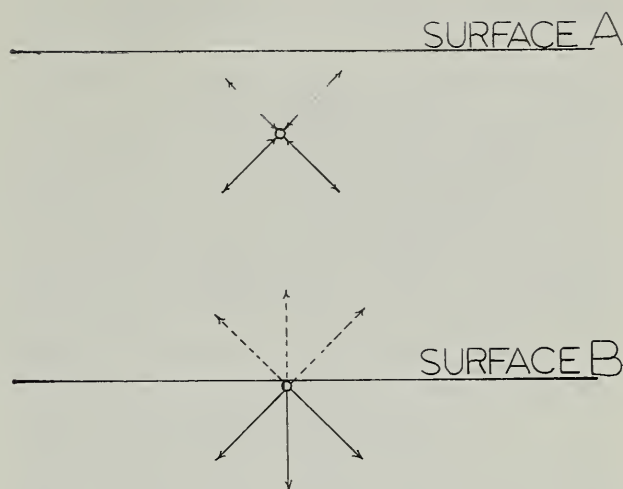


Figure 1. The molecule under surface A is under intermolecular attractive forces from all directions, and their vector sum is zero. The surface molecule at B has more potential energy because of the force expended in maintaining it in its surface position.

face tension phenomenon has been found to exert a considerable positive effect on the elasticity of the lung. Brown³⁹ has calculated the surface area of the lungs of a normal 70 kg. man to be approximately 630 square feet. This lung surface is comprised largely of several hundred million tiny alveoli and alveolar sacs which are responsible for the observed forces of surface tension in the lungs.

LaPlace's equation relates wall tension, internal pressure and radius in cylindroids or spheroids, and is stated in consistent units as:³⁹

$$P = \frac{2T}{R}$$

P = pressure
T = tension
R = radius

Values for surface tension of water, and for plasma and tissue fluids at 37°C have been found experimentally 70 dynes/centimeter and 50 dynes/centimeter respectively.²¹ With the minute dimensions of the alveolar units being 60-80 micra and the surface tension of the fluid lining being 50 dynes/centimeter, it can be determined from LaPlace's equation that the pressure inside the alveolus

$$\text{PRESSURE} = \frac{2 \times \text{TENSION}}{\text{RADIUS}}$$

Figure 2. LaPlace's Law. Within a given sphere, the pressure (P) tending to maintain or collapse that sphere is proportional to the radius (R) and to twice the tension (T) at the surface.

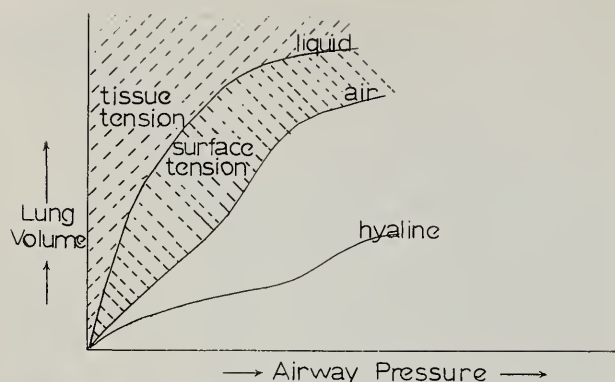


Figure 3. In excised lungs, static measurements of airway pressure reveal that greater pressure is required to expand lungs with air than fluid, and even more pressure to expand lungs of infants dying with hyaline-membrane disease.

would be in the order of 20,000 dynes/square centimeter.⁴⁰

A number of investigators have focused their attention on the phenomena of surface forces in the lungs. Van Neergaard²¹ first observed this interesting relationship of the power of surface forces in the lung. Recently his observations have been confirmed by Mead, Clements and numerous other workers.^{12, 42, 43, 44} They have found that after forced deflation, the pressure required to distend excised lungs with air is nearly 50 per cent greater than the pressure required to distend saline filled lungs (see figure 3). These static measurements reflect only the difference due to the effect of surface tension; however, a discrepancy between the *calculated* force required to inflate these lungs and the *actual* force required to inflate them was consistently observed. They found that at a functional lung volume (*i.e.*, within the range of tidal exchange), much less actual pressure was required to inflate the lungs. In comparing the *actual* and *calculated* values it was noted that the *calculated* effect of surface tension was several times too large, and in order to explain the experimental observations, the surface tension of the tissue fluids must be approximately 10 dynes/cm. Moreover, at larger lung volumes (*i.e.*, within the range of maximal inspiration), a greater pressure was required to further inflate these lungs. In the hyperaerated state, the surface tension was more nearly correlated with the actual tis-

sue fluid tension of 50 dynes/cm. Thus, surface tension apparently varies with the state of lung inflation and surface tension is lower than theoretically computed. Other clinical observations seem to argue against the *calculated* effect of surface tension in the lungs. It is well known that pulmonary edema fluid retains its bubbly nature for quite some time,³² and similarly, small bubbles expressed from excised lungs are very stable. If the surface tension of the fluids were as great as computed theoretically, these foams should not persist. Both these observations indicate that there is indeed a very low surface tension, in fact nearly zero, in the tissue fluids of the lungs.

In view of the apparent paradox of rather substantial forces of surface tension in intact lungs and of negligible forces of surface tension in fluids and extracts from these lungs, Clements, Brown, and Avery,^{21, 42, 43} felt that there must be a variable behavior of surface tension forces *in vivo*. Indeed this theory was borne out with the above observation of increasing surface tension forces with increasing inflation and alveolar size.

These observations can be resolved by postulating the presence of a material which alters the tension-area relationships in the lungs. Soaps and detergents are known to produce such a type of tension-area relationship,³⁸ and these agents are classic examples of surface-active agents or surfactants. A surface-active agent is a material whose molecules have weaker forces of mutual attraction for one another and for molecules of other species;³⁷ soaps, detergents, and some naturally occurring substances, *e.g.* lysolecithin and lecithin, are examples of this class of compounds. These molecules tend to accumulate in excess at surfaces when mixed in solution and act as bridges between dissimilar molecules. By virtue of their molecular structure this class of polar compounds contains both hydrophobic and hydrophilic chemical groups. The molecules orient themselves at the interface and bridge the interface between the phases. In this manner, the surfactant wets and penetrates, thereby stabilizing emulsions and foams through a surface tension lowering effect.⁴⁷ The tendency of these surface active agents to accumulate at surfaces, in effect, opposes the forces of Laplace by diminishing the surface

NORMAL

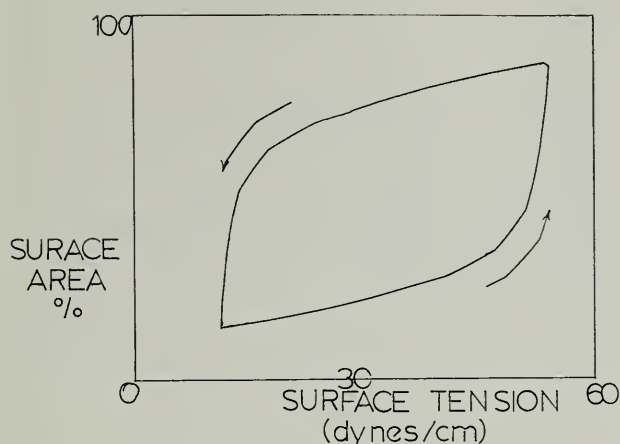


Figure 4. Tension-area diagram. This inscription by a Wilhelmy balance indicates the changing surface tension of lung extracts as surface area changes.

tension. It should be noted that the efficiency of the surfaceactive agent in reducing surface tension is directly proportional to its concentration at the interface. In other words, the greater the concentration of surfactant at an interface the greater will be the reduction in surface tension.

In an effort to verify the postulate that surface tension diminishes at smaller alveolar volumes and to elucidate the effect of surface active materials, these investigators utilized a Wilhelmy balance.^{42, 45, 46, 48} This is an experimental device for measuring surface tension which consists of a trough across which a thin film may be spread. A moveable cross bar forms one side of the film and allows changing surface area easily. A strain gauge is attached to a silver wire on the surface of the fluid extract. The strain gauge monitors the changes in surface tension as the surface area of lung extracts change in the experimental model. Indeed, the theoretical considerations were borne out and a marked decrease in surface tension occurred; it was observed that the surface tension fell from approximately 40 dynes/cm.² to three dynes/cm.² with a 20 per cent decrease in surface area (see figure 4).

It is interesting to observe that the pressure-area relationships of surface active extracts from children dying of hyaline membrane disease show very little reduction in surface tension as the area is reduced; this is a reflection of the high surface tension

which is maintained in these infants (see figure 5).

Thus, these laboratory observations may serve to explain the paradox observed by Brown, Clements, and van Neergaard.^{21, 42, 43, 44} At large alveolar volumes, the surface film is stretched and surface active materials are thinned out so that the forces of surface tension act unabated in their contribution to lung elasticity. In an opposite manner at low alveolar volumes, the film and surface-active materials are compressed and the associated reduction in surface tension acts to prevent collapse of alveoli due to surface forces, *i.e.*, it lessens the effect of elasticity. The discovery of this phenomenon forms the basis for recent advances in the pathophysiology of various forms of atelectasis.

PHYSICAL AND PHYSIOLOGICAL PROPERTIES OF THE ALVEOLAR LINING LAYER

The existence and precise source of an alveolar lining layer remained a moot point until the advent of electron microscopic studies.²² Macklin²⁴ supported this concept with his observation of a dynamic mucoid alveolar microfilm; he was among the first investigators to attribute the property of maintenance of surface tension to this film.

Miller and Bondurant⁴⁸ discovered that lungs of amphibians and birds lack the surface-active material. In addition these non-mammalian species lack mitochondrial gran-

HYALINE MEMBRANE

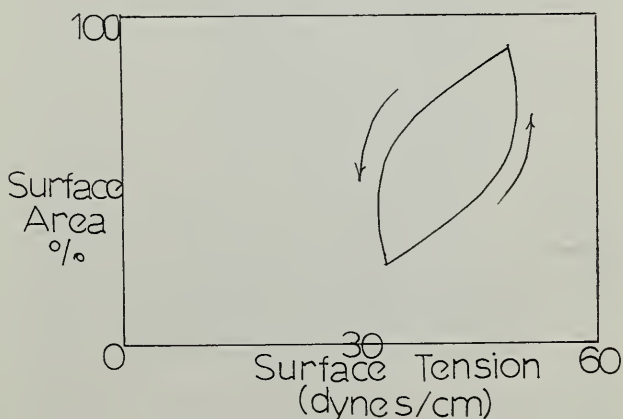


Figure 5. Tension-area diagram. This inscription illustrates the marked increase and the maintenance of a high surface tension in extracts from lungs of infants with hyaline-membrane disease.

ules in the alveolar cell cytoplasm. Klauss, *et al.*,¹⁵ found that after bilateral vagotomy, guinea pigs showed a reduction in the number of inclusion bodies in alveolar cells and a concomitant reduction in surfactant. Ultra-centrifugation studies by these investigators⁵⁰ reveal that the mitochondrial fraction of the subcellular constituents represents the strongly active material while other cellular fractions do not exhibit such surface activity.

Recently, Brooks²¹ has demonstrated mitochondrial lamellar transformation in the alveolar epithelial cells. He postulated that mitochondria produce the surface-active agent, and transformed mitochondria transport it to the alveolar surface where it can be seen erupting into the alveolar air spaces (see illustration III).

Qualitative analysis of this surfactant by Klauss⁴⁹ revealed that it is a complex lipoprotein, composed mainly of phospholipids and protein with smaller amounts of cholesterol, triglycerides, and fatty acids. Pattle⁵¹ agrees that there is a high phospholipid content in the surfactant. Brown⁵² obtained dipalmitoyl phosphatidyl choline from washings of healthy lungs; he was able to show that it possesses many of the properties of the complex surfactant, but it was not so active as the protein complex. Lecithin (phosphatidyl choline) serves as a prototype for the surface-active material (see figure 6);

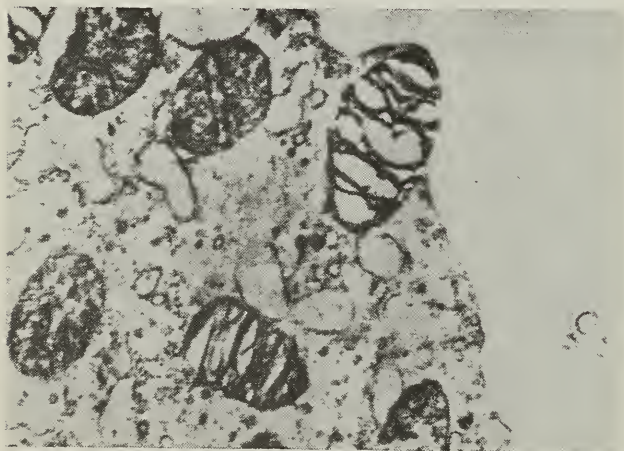
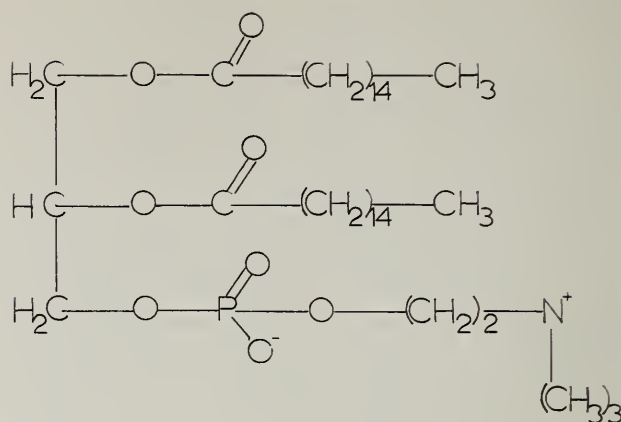


Illustration III. Lamellar transformation of alveolar cell mitochondria can be clearly visualized in this electron photomicrograph by Robert E. Brooks. An altered mitochondrion can be seen erupting into the alveolar space from the alveolar cell. (From *Sci. Am.* 207: 121, 1962; reproduced with permission of authors.)



LECITHIN
(phosphatidyl choline)

Figure 6. Lecithin (phosphatidyl choline) has been isolated in complex form from lung extracts; it exhibits surface tension lowering properties and may serve as a prototype of the "anti-atelectasis factor."

this compound has been found among the constituents of this complex lipoprotein and inherently exhibits surface activity.

Precise chemical characterization of the surface-active material will require further investigation.

The appearance and onset of activity of the lung lining film is correlated with the histological appearance of the lung. It has been shown by Pattle⁵³ that the capacity to form such a film appears at the time when the larger lumina of the lung cease to be lined with cuboidal epithelium; this transformation usually occurs at about the twenty-fourth week of human fetal life. These studies indicate that the pulmonary surfactant is rather late in appearing, *i.e.*, within the last trimester of pregnancy. However, its causal relationship to the respiratory distress syndrome with atelectasis cannot be deduced from these studies.

CLINICAL AND PATHOLOGICAL CORRELATION OF THE SURFACE ACTIVITY PHENOMENON AND RESPIRATORY DISTRESS SYNDROMES IN INFANTS AND ADULTS

Clinical observations have revealed several interesting facts concerning respiratory distress syndromes in adults and infants. Tooley, *et al.*⁵⁴ have observed that blood cir-

culated through a pump-oxygenator for over six hours and then transfused to dogs resulted in hyaline membranes and atelectasis. These same investigators⁵⁵ also observed that after unilateral pulmonary artery occlusion in dogs there was a reduction in lung volume, decrease in alveolar size, patchy atelectasis, hyaline membranes and an increase in the minimal surface tension of lung extracts. These observations point toward the presence of some toxic substance liberated or produced by alterations in the blood during pump-oxygenation, and also the latter studies seem to indicate that the integrity of the alveolar cells is more dependent on pulmonary arterial blood flow than on alveolar oxygen supply.

Prolonged atelectasis *in vivo* may alter the alveolar lining layer secondarily. Sutnick and Soloff⁵⁶ found a decreased amount of extractable surfactant in the adult atelectatic lung. Therefore, it seems probable that poor oxygenation of atelectatic segments will alter the surface layer just as it does in the case of pulmonary artery occlusion. Thus hypoxia may serve as the insulting factor in the disruption of the alveolar lining.

Subsequent to the demonstration by van Breemen⁷ that fibrin is a major component of the pulmonary hyaline membranes, Lieberman^{57, 58} examined the fibrinolytic enzyme systems in affected lungs. Initial studies seemed to indicate that these affected lungs were deficient in plasminogen activator and that this was the explanation for the persistence of fibrin coagula in the typical membranes. Recently, Lieberman has demonstrated the presence of a potent inhibitor of plasminogen activation in such tissues, and this mechanism could thereby prevent normal dissolution of a fibrin coagulum. In a recent editorial, Lieberman⁵⁹ now acknowledges the possibility of a multiplicity of factors operating to produce the florid clinical picture of the respiratory distress syndrome with atelectasis.

Surface tension is known to play an important role in the maintenance of the osmotic equilibrium of the alveolar unit with its surrounding tissue fluids. Clements, *et al.*⁴¹ point out the effect that surface tension forces produce in opposing the osmotic gradient and thereby tend to pull fluid into the alveoli. If it were not for the presence of

the pulmonary surfactant and its ability to reduce surface tension, the osmotic gradient might conceivably be reversed resulting in an alveolar effusion. In fact, the absence of the surface tension lowering substance has been implicated in the production of alveolar effusions by this mechanism of altered osmotic equilibrium with the subsequent development of fibrin coagula and "membranes."^{11, 58}

In summary, three parameters have been postulated to explain the spectrum of pulmonary disease found in hyaline membrane disease: (1) Decreased surface tension lowering substance, (2) Enhanced and pathological pulmonary exudations, (3) Inhibited fibrinolysis within the alveoli. It must be considered that the deficiencies of surfactant and the deficiencies of fibrinolysin may represent deficiencies of the same or similar substances and that the pulmonary exudation may only represent an exaggeration of a physiologic process due to the increased surface tension.

It seems clear that the pathological alterations observed in certain forms of the respiratory distress syndrome are correlated in most instances with a diminished amount and activity of the surface active component of the alveolar lining layer. At present deficiencies of the "anti-atelectasis factor" and inhibited plasminogen activation in pulmonary tissues of typical hyaline membrane syndrome seem to be components of a non-specific pathophysiologic response of young infants to factors yet unidentified, acting in the natal or early post-natal period. Whether this absence of surface active material is primary or secondary remains to be determined at the present stage of investigation. In other words, is the diminished surface activity the cause or the result of other phenomena observed in the respiratory distress syndrome?

SUMMARY

The clinical manifestations of the respiratory distress syndrome have been reviewed. The microscopic anatomy of the lung units has been described. Pathophysiological alterations which are secondary to atelectasis have been outlined in the neurological and cardiopulmonary sequelae of this syndrome.

The effects of surface phenomena on normal respiratory physiology was analyzed. The importance of the alveolar lining layer and its contribution to alveolar stability was discussed.

The recent advances in respiratory distress syndrome of adults and infants are correlated with the physiological role of surface-active materials as well as fibrinolysin deficiencies.

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ABSTRACTS

CAN THE GOOD LIFE PREVENT HEART ATTACKS

This paper reports a study of the death rate due to myocardial infarction in Roseta, Pennsylvania compared to four other towns in the area. Hospital records were reviewed and the attending physician consulted with regard to all patients reported to have died of cardiovascular disease. It was found that the death rate due to myocardial infarction was significantly less in Roseta. There were no deaths under the age of 47. Death rates from arteriosclerotic heart disease and other causes were essentially similar. Incomplete dietary studies indicate that the Rosetans eat an Italian diet rich in fat and calories. Both men and women over age 21 were overweight. The social conditions of the community were emphasized by the authors. Rosetans were found to be mutually supporting and trusting. The citizens are described as "gay, boisterous, and unpretentious" with the wealthy dressing similarly to their poorer neighbors. There is no crime in Roseta.

Whether their sensible way of life contributes to their good health remains to be determined. Genetic and ethnic factors may be important. It is interesting to note, however, that myocardial infarction at relatively young ages has occurred in people born in Roseta but who have lived most of their life elsewhere.

EDITOR'S NOTE: It would appear that the best course would be to live a happy life and cut down on calories and fat.

Unusually Low Incidence of Death From Myocardial Infarction, Clarke Stout, M.D., Jerry Morrow, M.D., Edward N. Brandt, Jr., M.D., and Stewart Wolf, M.D. *Journal of the American Medical Assoc.*, 188, 10: 121-125, June 8, 1964.

? A NEW SYNDROME

In this article the author has collected 14 similar cases. These patients present with a prodrome of fatigue and emotional tension precipitated by an acute influenza-like illness. There is mental depression, occipital headache, easy fatigability, increased sweating, mild joint pains and "restless legs." The physical signs include cold, wet hands and feet, dark eyelids and mild nailbed cyanosis. Laboratory findings are low basal metabolic rate, elevated blood cholesterol and uric acid level, normal blood sugar, and reversal of the neutrophil-lymphocyte ratio. The 24 hour excretion of 17 ketosteroids and 17-OH corticoids were low in seven cases and normal in seven. The response to ACTH appeared to be subnormal although this was not commented on by the author. These patients had remarkable improvement in their symptoms after 40 units ACTH gel. Two patients did not respond to saline injections. Treatment was carried out from a period of three months in the shortest to 63 months in the longest before it could be discontinued without return of symptoms.

EDITOR'S NOTE: I'm afraid we would have to ask for more complete studies before we could attribute the syndrome to defective ACTH secretion. It remains

a fascinating possibility. I would like to emphasize that many endocrine diseases masquerade as mental conditions and vice versa. Mistakes are made constantly on both sides.

An Unusual Syndrome Responding To Prolonged ACTH Therapy, M. E. Groover, Jr., *Journal of the American Geriatrics Society*, 12, 350, April, 1964.

RECENT PUBLICATIONS

The *Journal* welcomes the opportunity to list current publications by any Oklahoma physician.

A Quantitative Evaluation of Functional Stenosis of the Semilunar Valve, Robert H. Bayley, *American Heart Journal*, 67: 508-511, April, 1964.

Central Nervous System Effects of Chronic Exposure to Organophosphate Insecticides, J. Robert Dille, M.D., and Paul W. Smith, Ph.D., *Aerospace Medicine*, 35: 475-478, May, 1964.

Neutralization of Bacteriophage Φ X174 by Specific Antiserum, B. U. Bowman, Jr., and R. A. Patnode, *Journal of Immunology*, 92: 514, 1964.

Immunofluorescence and Antinuclear Antibodies, George J. Friou, M.D., *Arthritis and Rheumatism*, 7: 161-166, April, 1964.

Male-Female Difference in Underwater Sensory Isolation, Cathryn Walters, Oscar A. Parsons, and Jay T. Shurley, *The British Journal of Psychiatry*, 110: 290-95, March, 1964.

Effect of Adenosine Triphosphate Administration In Irreversible Hemorrhagic Shock, Samir M. Talaat, Walter H. Massion, John A. Schilling, *Surgery*, 55: 813, June, 1964.

Effect of Galactose on Urinary Electrolyte Excretion in Man, Robert D. Lindeman, H. Earl Ginn, John M. Kalbfleisch, and William O. Smith, *Proceedings of the Society for Experimental Biology and Medicine*, 115: 264-67, 1964.

The Measurement of Evaporative Water Loss by a Thermal Conductivity Cell, T. Adams, G. E. Funkhouser, & W. W. Kendall, *J. Applied Physiology*, 18: 1291, 1963.

Specific Nuclear Reaction Pattern of Antibody to DNA in lupus erythematosus sera, Salvador P. Casals, George J. Friou, & Perry O. Teague, *Journal of Laboratory and Clinical Medicine*, St. Louis, 62: 625-631, Oct., 1963.

Pediatric Evaluation of Speech and Hearing Disorders, Sylvia O. Richardson, M.D., *Clin. Pediat.*, 3: 150, March, 1964.

The Pyloric Tit in Hypertrophic Pyloric Stenosis, Charles E. Shopfner, *Am. J. Roentg. Rad. Thera & Nucl. Med.* XCI: 674-679, March, 1964.

Reprints of the above publications are usually available on request from the senior author, c/o Mrs. Joan Campbell, Veterans Administration Hospital, 921 N.E. 13th Street, Oklahoma City, Oklahoma.

The Relationship of Physical Activity to the Serum Cholesterol Concentration

JOHN NAUGHTON, M.D.

It is well-known that the serum concentration of cholesterol may be altered by many factors. The level is usually lowered by caloric restriction or alterations in the quality of fat intake while it is almost invariably elevated following periods of emotional stress.

Another factor which is known to affect the level of serum cholesterol is physical activity. Taylor¹ found the cholesterol level lower in young men after a period of daily physical activity. However, the subjects lost weight during the training program and he attributed the changes to dietary alterations and weight loss rather than to the physical activity *per se*. Similarly, Montoye² found that six weeks of regular, daily physical activity was followed by a reduction of the resting cholesterol concentration in middle-aged men. Six weeks of deconditioning in these same subjects was associated with a return of the cholesterol concentration to the pre-training levels.

From the Department of Medicine and the Neurocardiology Research Center of the University of Oklahoma Medical Center, Oklahoma City, Oklahoma.

Produced under the auspices of the Professional Education Committee of the Oklahoma State Heart Association.

Such observations have prompted an investigation of the effects of physical training on the cholesterol concentration in a group of twenty middle-aged men from Oklahoma County. Ten of them were presumably healthy while ten had recovered from well documented episodes of myocardial infarction. The cardiac patients were essentially asymptomatic and had no serious complications. A venous blood specimen for determination of the serum cholesterol concentration was obtained during rest and after an acute exercise performance at the beginning and at the end of the program. All of them participated in a regular physical conditioning program for six months.

The results are tabulated in table 1. The weight of the two groups were comparable before and after training. The weight did not vary significantly during the six month period, a fact which indicates the subjects probably increased their daily caloric intake to meet the added demands of the training program instead of maintaining their pre-conditioning dietary intake. It is estimated that these subjects utilized between 250-300

TABLE I

Group	Weight (kg)		Cholesterol (mg/100 ml)		P
	Pre-Training	Post-Training	Pre-Training	Post-Training	
10 Cardiac Patients	76.7±13.3	76.8±10.9	236±44.9	212±20.0	<.05
10 Healthy Men	80.0±9.5	79.7±11.5	205±39.1	169±43.8	<.01

Table I: The weight and cholesterol concentration were determined in the two groups of men before and after six months of regular physical conditioning. Weight did not differ significantly following training. However, the resting cholesterol levels decreased significantly in both the healthy men and the cardiac patients.

kcal per activity period. The serum cholesterol concentration was significantly higher in these patients than in the healthy men before and after the training period. However, physical training had the same effect in both groups of men, *i.e.*, a lowering of the resting cholesterol level. This change occurred despite the fact that neither group lost appreciable weight nor altered the quality of the caloric content in their diets. Both groups responded to acute exercise with an elevation of the serum cholesterol concentration before and after the program.

These results agree with those observed in a younger population of medical personnel.³ These twenty middle-aged subjects have volunteered for a long-term physical training program. It will be of interest to establish how long the lowered serum cholesterol concentration can be maintained, and whether or not it will return to its original levels after some of the subjects have discontinued the training program.

These observations raise many unanswered questions. The elevation of serum cholesterol levels following acute exercise is rather constant. It is known that exercise stimulates mobilization of catechol amines, particularly norepinephrine, which in turn

causes the release of free fatty acids and other lipids. These products serve as a source of energy with which the individuals meet the demands of exercise. It is of interest that these same changes have been observed in patients with hypopituitarism and with bilateral adrenalectomy.

The mechanism for the lower cholesterol concentration following physical training has not been defined. It has been speculated that the hepatic storage of glycogen and of cholesterol is increased with training. It could be that the physically active individual has a more efficient mechanism for mobilizing and storing cholesterol than does the sedentary one.

These effects on the cholesterol concentration provide another bit of evidence supporting the use of regular, vigorous physical activity as a preventive and therapeutic measure. □

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CONFLICT OVER DOCTOR SUPPLY?

A 1959 Surgeon General's report estimated that the U.S. would need 339,000 doctors by 1975, the production of which would require 20 to 24 new medical schools. However, in the 1964 Health Source Book of the U.S. Public Health Service, it is estimated that there will be 356,900 physicians in the U.S. by 1975 even at the present rate of output.

The American Medical Association says the divergent calculations result from an underestimate of physician population made in the 1959 report, in addition to an underestimate of the number of new foreign licentiates. AMA's Council on Medical Education is launching a study of the problem.

AMA Hits Medicare, Ducks Dues Increase

Health care for the aging, a proposed dues increase, a new teletype communications system for the medical profession, a statement on human reproduction and recommendations from the Commission on the Cost of Medical Care were among the major subjects acted upon by the House of Delegates at the American Medical Association's 18th Clinical Convention held November 29th-December 2nd in Miami Beach, Florida.

Tribute was paid to the late Doctor Norman A. Welch, AMA President who died on September 3rd, in a memorial statement from the Massachusetts Medical Society and in a resolution adopted by the House.

Doctor James Z. Appel of Lancaster, Pennsylvania, vice-chairman of the AMA Board of Trustees and a member of the Board since 1957, was named President-Elect of the Association. He will become President in June, 1965, succeeding Doctor Donovan F. Ward of Dubuque, Iowa, who took office after the death of Doctor Welch.

To take Doctor Appel's place on the AMA Board of Trustees, the House elected Doctor Joseph B. Copeland of Austin, Texas, who for the past year has been serving as Deputy Commissioner of Health in the State of Texas. Doctor Copeland was unsuccessfully opposed by Malcom E. Phelps, M.D., El Reno, Oklahoma, who quickly moved that Doctor Copeland's election be made unanimous.

Final registration at the convention reached a total of 9,356, including 4,118 physicians.

Health Care for the Aging

Definitive action on the issue of health care for the aging came with the House of Delegates' strong endorsement of Doctor Ward's Monday address, in which he declared that

"We have no choice except to stand firm in our efforts to prevent the standards of health care in this country from being undermined by a radical departure from the unique American way which has accomplished so much for mankind."

Reaffirming the Association's opposition to the King-Anderson type of legislation, Doctor Ward said:

"If we have been right in the past—and that is our unshakeable belief—then we are right today. And we shall be right tomorrow."

Calling for renewed, intensive effort to prevent the passage of such legislation, he pointed out that "we do not, by profession, compromise in matters of life and death. Nor can we compromise with honor and duty."

Doctor Ward, expressing pride in the medical profession, concluded his address with these statements:

"I pray that we all gain strength for renewed effort by the simple reflection that what we are doing is worthwhile—that if the effort is great, the results of not making the effort would be unthinkable—and, finally, what we are doing is vastly more important than ourselves."

"No more can be asked of us as citizens. No less should be offered by us in guarding our heritage of freedom."

To implement the ideas in Doctor Ward's address, the House gave unequivocal approval of a Board of Trustees suggestion that an expanded educational program be conducted in the next few months. In asking for this approval, the Board pointed out that "a variety of techniques and media must be utilized if the public, the Congress and special audiences are to be reached effectively."

The House took no action on three resolutions which would have altered

the AMA position on health care legislation. Instead, the House adopted a resolution which urged "component associations to stimulate the state and local governments to seek the fullest possible implementation of existing mechanisms, including the voluntary health insurance principle, to the end that everyone in need, regardless of age, is assured that necessary health care will be available."

The state medical societies also were urged to send representatives to two forthcoming conferences related to the issue of health for the aging—one on December 13th to help plan the new educational program and the other on January 9th-10th, 1965, to consider further implementation and expansion of the Kerr-Mills programs.

Dues

Brushing aside a strong effort to raise AMA dues, an effort initiated at last June's House of Delegates meeting in San Francisco, the Board of Trustees recommended that no dues increase be approved at this time. The Board's report received no opposition from the Miami Beach assembly of the House of Delegates.

Teletype Communications System

The House approved a recommendation from the Board of Trustees for establishment of a teletypewriter communications service between the AMA and the state medical societies. The system will provide automatic and uninterrupted communications between AMA Headquarters and all participating state societies, and between the state societies without involving the facilities at the AMA Headquarters. The system also will enable any state society to communicate with all other TWX subscribers in the United States and Canada.

In approving the recommendation, the House emphasized that participation is optional with the state medical societies but it also urged each society to "seriously consider taking advantage of this rapid communications system." Installation and rental costs for the teletype equipment, both at AMA Headquarters and at the headquarters of each participating medical society, will be paid by the AMA. The cost of transmitting messages will be paid by whichever organization originates each message. It is hoped that the new communications system will become operative no later than July, 1965.

Human Reproduction

Updating its policies on population control, "to conform to changes in society and medicine" and to "take a more positive position on this very important medical - socio - economic problem," the House adopted the following four-point statement:

"1. An intelligent recognition of the problems that relate to human reproduction, including the need for population control, is more than a matter of responsible parenthood; it is a matter of responsible medical practice.

"2. The medical profession should accept a major responsibility in matters related to human reproduction as they affect the total population and the individual family.

"3. In discharging this responsibility, physicians must be prepared to provide counsel and guidance when the needs of their patients require it or refer the patients to appropriate persons.

"4. The AMA shall take the responsibility for disseminating information to physicians on all phases of human reproduction, including sexual behavior, by whatever means are appropriate."

In taking the action, the House also recommended that the AMA cooperate with the appropriate voluntary organizations in the field of human reproduction which have adequate medical direction.

Commission on the Cost of Medical Care

With modifications suggested by

the Board of Trustees, the House approved 33 recommendations from the Commission on the Cost of Medical Care. The suggestions had been rearranged by the Board into four sections — Research, Hospitals, Physicians and Miscellaneous. In accepting the Board report, the House also rejected a floor amendment which recommended that a medical advisory committee composed of practicing physicians be appointed to supervise the several studies which were suggested.

In presenting its conclusions and recommendations to the Board of Trustees, the Commission on the Cost of Medical Care expressed the hope "that the recommendations which are approved will help promote the wisest possible use of the medical care dollar and aid in the development of more meaningful data on the cost of medical care."

The House learned that a substantial number of the studies recommended by the Commission are already under way and that others are in the process of being implemented. The House also emphasized its appreciation of the importance of these continuing studies and urged that adequate funds be provided for maximum implementation of the recommendations.

Miscellaneous Actions

In considering a wide variety of annual reports, special and supplementary reports and resolutions, the House also:

- Amended the Bylaws to permit the presidential inauguration to take place at a time other than Tuesday evening and approved a suggestion that the inaugural ceremony at the 1965 Annual Convention be held on Sunday, June 20th;

- Amended the Bylaws to permit presentation of the AMA Distinguished Service Award at a time to be determined by the Board of Trustees and learned that the Board wishes to present this award at the Scientific Awards Dinner;

- Agreed that the AMA should cooperate with the U.S. Public Health Service in eradicating the *Aedes aegypti* mosquito from the American hemisphere;

- Urged strong support of the Woman's Auxiliary and asked the state and county medical societies to give serious consideration to the idea of joint husband-wife membership;

- Reaffirmed its position that "general practitioners should have the opportunity to practice medicine as active staff members in hospitals and should have granted to them such hospital privileges as their training and demonstrated skills indicate." The House also approved the accumulation of evidence of discriminatory practices with regard to general practitioners and other non-specialists;

- Agreed that a section on Space Medicine should not be created at this time;

- Emphasized its continuing awareness of the demand for action on satisfying the need for increasing numbers of family physicians;

- Urged all state and component medical associations to approve, where feasible, the inclusion of a voluntary, nondeductible contribution to independent political action committees on the society's annual dues billing statement;

- Approved a Board recommendation that the 1967 Clinical Convention be held in Houston, Texas;

- Agreed with the Board that there should not be an increase in AMA dues at this time;

- Reaffirmed its approval and support of the National Council for Accreditation of Nursing Homes, and;

- Instructed the Board to re-evaluate the mission of the Commission on Medical Practice and take appropriate action.

The American Medical Association Education and Research Foundation reported to the House that one out of every six medical students, interns and residents in the U.S. is now receiving financial assistance from the Foundation's loan fund. The AMA-ERF also announced that Merck Sharp & Doime pharmaceutical company has made its fourth \$100,000 contribution to the loan fund and has pledged an additional \$100,000 in 1966. □

OSMA-Blue Shield Trustees to Meet

Harlan Thomas, M.D., OSMA President, and N. D. Helland, Blue Cross-Blue Shield President, have announced an important joint meeting between The Boards of Trustees of the medical group and Blue Shield, to be held in Oklahoma City, January 10th at the Ramada Inn.

The idea for the combined session emerged from the recent annual meeting of the Blue Shield Trustees, which was attended by OSMA officers, key committeemen and staff, and the project has since been approved by the medical association's Board.

Generally, the purposes of the conference are to discuss medical economic conditions which need the attention of both organizations, and to seek ways and means to improve the relationship between organized medicine and the prepayment plan, with the ultimate objective of providing improved programs for health care financing in Oklahoma.

Although neither Board will be pressed to make final policy decisions at the conference, it is expected that the following general objectives will be introduced for discussion and consideration:

The OSMA should seriously consider *endorsing Blue Shield* as the preferred program of prepayment protection for all Oklahomans.

The OSMA and Blue Shield should *present a joint image* to the public—the OSMA as the provider of medical care and Blue Shield as the OSMA's preferred fiscal agent to assist Oklahomans in paying for such care.

The joint image of the two organizations should be *aggressively sold to the public and to the medical profession*.

The OSMA and Blue Shield, through appropriate joint committee action, should undertake studies to *determine the adequacy* of the present Blue Shield product to meet the needs of Oklahomans of various economic strata. The price versus quality syndrome should be studied, and *recommendations formulated* which

will result in effective cost control, competitive innovations in product design, massive enrollment of Oklahomans, and other improvements.

OSMA's Prepaid Medical Care Committee, under the chairmanship of Paul A. Bischoff, M.D., Tulsa, is working with the OSMA Executive Secretary and Blue Shield Professional Relations Director Windham Hill in preparing the program format for the January joint conference.

Program Outlined

Present program plans are:

10:00 a.m.—WELCOME, Glen Leslie, President, Blue Shield Board of Trustees

10:05 a.m.—RESPONSE, Harlan Thomas, M.D., President, OSMA

10:10 a.m.—ECONOMIC FACTS AND PRINCIPLES OF BLUE SHIELD, W. R. Bethel, Vice-President, Blue Cross-Blue Shield

10:50 a.m.—ECONOMIC RESPONSIBILITY: THE DOCTOR'S DILEMMA, Rex E. Kenyon, M.D., President-Elect, OSMA

11:30 a.m.—AN APPRAISAL OF BLUE SHIELD, George H. Garrison, M.D., Blue Shield Trustee

12:00 Noon—LUNCHEON PROGRAM (Nationally prominent speaker to be named.)

1:30 p.m.—MEETING THE CHALLENGE . . . TOGETHER, N. D. Helland, President, Blue Cross-Blue Shield

2:15 p.m.—PANEL DISCUSSION, Presiding: Glen Leslie; Panelists: All program participants

3:30 p.m.—CONFERENCE SUMMARY, Don Blair, OSMA Executive Secretary

Attendance Urged

The proposed conference is believed to be a milestone in the dynamic development of medical economics, and a supreme effort will be made to assure 100 per cent attendance from the OSMA Board of Trustees, the OSMA Prepaid Medical Care Committee, and the association's Council on Socio-Economic Activities. □

OSMA Opposes U. S. Chamber's OASI Stand

The Oklahoma State Medical Association has officially appealed to the Economic Security Committee of the U.S. Chamber of Commerce to rescind its policy urging compulsory Social Security protection for all remaining uncovered categories of the nation's population, including self-employed physicians.

Testimony was presented to the Chamber's committee on December 11th in Washington, D.C., by Charles L. Johnson, M.D., Bartlesville, who prepared the OSMA statement in cooperation with Rex E. Kenyon, M.D., Chairman of the Oklahoma State Medical Association's Council on Public Policy.

Doctor Kenyon, who was in Washington to confer with AMA officials regarding proposed Medicare legislation, accompanied Doctor Johnson when he appeared before the chamber's committee.

Other state medical societies offering testimony against the stand of the national group were the Illinois State Medical Society and the Texas Medical Association. These groups were represented by Joe T. Nelson, M.D., Weatherford, Texas, and Edward A. Piszczek, M.D., Chicago, Illinois.

The full text of Doctor Johnson's statement is printed below: Mr. Chairman and Members of the Committee:

I am Charles L. Johnson, M.D., 421 South Cherokee, Bartlesville, Oklahoma. I am self-employed in the general practice of medicine.

Today, I appear before you as a member of the U.S. Chamber of Commerce and as a Director of the Bartlesville Chamber of Commerce. In addition, I am officially representing the Washington-Nowata County Medical Society, the Oklahoma State Medical Association, the Oklahoma Academy of General Practice, and also appear as a member of the American Association of Physicians and Surgeons.

The recommendation to extend Social Security coverage to include non-covered categories, including self-

employed physicians, would seem to find its most logical argument in the contention that until all the nation's workers are taken under the plan, those presently participating are being taxed unfairly. So, let us talk in terms of fairness. Permit me to say in the beginning that this nation's physicians, and most certainly those in Oklahoma, seek no special treatment which would compromise the principle of fairness. We submit, however, that physicians represent a unique group in that they continue to perform their professional services long after the usual or accepted, retirement age of 65. This extended service is tempered in part by choice, and in part by necessity. Permit me to offer some figures in support of these statements:

1. One out of every 11 doctors in the United States is 65 years of age or older. This group includes 23,000 practicing physicians and their numbers are increasing by approximately 2,500 physicians each year.
2. Eighty-five per cent of physicians now aged 65 to 72 are actively practicing.
3. These 23,000 physicians provide medical care for at least 11 million Americans.
4. If these physicians retire at age 65, a catastrophic shortage of doctors would necessarily result.

The average physician today, because of ever-lengthening training military service requirements, enters the private practice of medicine somewhere near his thirtieth birthday. If he follows the pattern of his older colleagues, he can expect to practice medicine until his seventy-second year before he can expect to receive any benefits from a Social Security program to which he has been contributing for 42 years. He can expect to work and to contribute for seven years after his friends in other businesses and professions have retired and are reaping the benefits of the program.

Under present law, the Social Security contributions for self-employed individuals will reach 6.9 per

cent on a taxable base of \$4,800 by 1968. Legislation considered by the past Congress would materially increase this contribution; and there is, as you know, every indication that the new Congress will write into law some proposal to broaden Social Security benefits coupled with the necessary measures to increase this source of taxation. Considering, however, the unlikely possibility that there will be no increased Social Security taxation, today's physician, under present law, would contribute in his 42-year working life an aggregate sum of \$13,910. At the advanced retirement age of 72 years, he cannot hope to receive from the Social Security system any retirement benefits which could approach the amount of this total contribution.

By virtue of his longevity of service, therefore, any law which would require a physician to contribute far beyond any anticipated return is contrary to the intent of Social Security, is opposed to the principle of insurance, with which this system is too frequently categorized; and it is patently unfair out of proportion to any inequity of taxation that might result from his being relieved of participation. And, it should be noted here that many physicians are already materially supporting the program through the employers' contribution to their employees' protection.

Other groups have joined by choice. Physicians, for the good reasons just enumerated, have consistently and repeatedly opposed any move which would compel them to participate in the Social Security program. In 1962 a poll of the entire Oklahoma State Medical Association membership revealed that 925 physicians were opposed to Social Security coverage, while only 312 favored it. Contrary to the allegation that it is the young physician who seeks coverage, those favoring Social Security coverage in Oklahoma were overwhelmingly from the older group.

The Oklahoma State Medical Association, our larger county societies, and many individual Oklahoma physicians are members of the United States Chamber of Commerce. We

have supported this organization because we believe in its aims and purposes; and we applaud its untiring efforts toward the goal of responsible government. We would respectfully request, as members, that the members of this committee reconsider the Chamber's recommendation that Social Security should be extended to include non-covered categories, and initiate whatever action is required to amend the policy declaration in this regard. We would support this request with the facts heretofore presented; and we would emphasize a deep conviction, to which we as physicians subscribe, that it is a basic human right of the individual to provide for his own security, freely, and without compulsion to contribute to or receive from government programs, if he chooses to do so. □

Federal Heart, Cancer and Stroke Centers Recommended

A Presidential Study Commission has recommended a \$2.9 billion program on heart disease, cancer and stroke.

The research and treatment plan would be built around a network of regional centers designed to learn more about these diseases which cause 70 per cent of American deaths.

The group urged establishment of a network of regional heart disease, cancer and stroke centers "for clinical investigation, teaching and patient care." These would be located in universities, hospitals, research institutes and other institutions. Included would be 25 centers for heart disease, 20 for cancer and 15 for stroke to be established over a five-year period. The program also would include a second national network of "diagnostic and treatment stations" located in communities throughout the nation, and increased grants for related research.

The AMA has withheld comment on the program. □

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william r. garretson, m. a.

Liability Conferences Popularly Received

Educational conferences on professional liability prevention are being well received by county and district medical societies, according to Dave B. Lhevine, M.D., Chairman of the OSMA Council on Insurance.

The meetings are being scheduled across the state as rapidly as possible, in an attempt to generally improve physician knowledge on medical-legal matters, and thus to avert unnecessary malpractice claims. To date, the Council on Insurance—working with attorneys of the St. Paul Fire and Marine Insurance Company—have held conferences for the phy-



Attorney Lee Grigg Addresses
Tulsa County Doctors

sicians of Garvin, Kay, Noble, Payne, Pawnee, Pittsburg, Osage and Tulsa Counties.

Schedules are being coordinated now to conduct January and February meetings in Lawton and Muskogee Counties, and others are planned throughout the Spring. The program is being generally made available to all county medical societies, upon the request of county officers.

Program Outlined

Presented by expert defense attorneys, the one and one-half hour program covers such topics as "The Definition of Negligence," "Specific, Common Causes of Malpractice,"

"Preventing Unwarranted Claims Through Proper Handling of Difficult Cases," "The Importance of Records," "The Use of Medico-Legal Forms," "Costs of Defense and Settlement," "Damage to Professional Reputation," "A Checklist For Prevention," "The Role of the Medical Assistant in Preventing Malpractice Claims," "Relationships With Patients," "How to Report a Potential Claim," "How A Case Is Handled, Once a Suit is Filed," "Oklahoma Professional Liability Statistics," "Technical Assault," and "Hospital Responsibilities."

Following lectures covering the basic subject matter, ample opportunity is provided in the program format for a question and answer period.

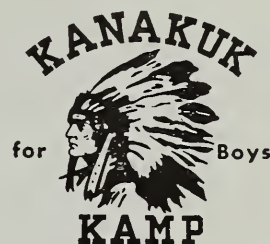
Costly Experience

"There is plenty of cause for concern over our professional liability experience in Oklahoma," Doctor Lhevine said, "but the adverse trend can be reversed through education against medical-legal pitfalls which result in so many unwarranted damage actions, and that's why the Council on Insurance hopes that all state doctors will do their homework and assist us in bringing the loss experience down to the irreducible minimum."

"Oklahoma once led the nation in the prevention of professional liability damage suits," he continued, "but recent experiences have skyrocketed us to the unhappy position as one of the more risky states, a position we want to change at the earliest possible time."

The physician pointed out that the high frequency of claims during the past few years has caused insurance premiums to be raised on two occasions. "However," he said, "the cycle is gaining momentum in the other direction now, and the Council on Insurance is confident that stability in our insurance program can be restored through the conferences and other educational means." □

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Osteopathic Relations Studied By Committee

M.D. — Osteopathic relations are being studied by a new OSMA Committee on Osteopathy, headed by Maxwell A. Johnson, M.D., Tulsa.

The committee was created last May by the association's House of Delegates, when the policy-making body approved a report recommending the creation of a new Council on Interprofessional Relations and related committees on osteopathy, pharmacy, law, nursing and religion.

A basic question confronting the association is the development of a local attitude toward the 1961 policy statement of the American Medical Association's House of Delegates.

This statement sets forth the following policy statements dealing with the osteopathic profession.

"1. There can never be an ethical relationship between a doctor of medicine and a cultist, that is, one who does not practice a system of healing founded on a scientific basis.

"2. There can never be a majority party and a minority party in any science. There cannot be two distinct sciences of medicine or two different, yet equally valid systems of medical practice.

"3. Recognition should be given to the transition presently occurring in osteopathy, which is evidence of an attempt by a significant number of those practicing osteopathic medicine to give their patients scientific medical care. This transition should be encouraged so that the evolutionary process can be expedited.

"4. It is appropriate for the American Medical Association to *re-appraise its application of policy* regarding relationships with doctors of osteopathy, in view of the transition of osteopathy into osteopathic medicine, in view of the fact that the colleges of osteopathy have modeled their curricula after medical schools, in view of the almost complete lack of osteopathic literature and the reliance of osteopaths on and use of medical literature, and in view of the fact that many doctors of osteopathy

are no longer practicing osteopathy.

"5. Policy should now be applied individually at state level according to the facts as they exist. Heretofore, this policy has been applied collectively at national level. The test now should be: Does the individual doctor of osteopathy practice osteopathy, or does he in fact practice a method of healing founded on a scientific basis? If he practices osteopathy, he practices a cult system of healing and all voluntary professional associations with him are unethical. If he bases his practice on the same scientific principles as those adhered to by members of the American Medical Association, voluntary professional relationships with him should not be deemed unethical." (*House of Delegates, 1961.*)

Since the passage of this national policy statement, fourteen state medical societies have ratified the AMA position and have enacted local regulations to provide for recognition of qualified osteopaths as scientific practitioners. However, in Oklahoma and in many other states, no action has been taken regarding the modified position of the national group, so it remains unethical for physicians to associate professionally on a voluntary basis with doctors of osteopathy.

In the meantime, osteopaths have achieved hospital staff privileges in some nineteen of the state's general hospitals, and many doctors of medicine are therefore forced into involuntary association with osteopaths. Such involuntary fraternization is not considered to be unethical.

There is also mounting pressure from the Oklahoma Osteopathic Association for access to the postgraduate training programs of the University of Oklahoma School of Medicine.

A complete review of the varied interprofessional relations problems existing between the two professional groups is now underway, and the OSMA Committee has already conducted two meetings on the subject with a third one scheduled for January 17th.

At a December 6th meeting of the group, special guests were Samuel P.

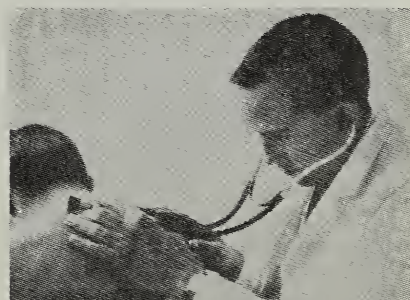
Newman, M.D., Denver, Chairman of the AMA Committee on Osteopathy and Medicine, and William J. McAuliffe, Jr., LL.M., secretary to the AMA Committee.

As a result of this meeting, the OSMA Committee adopted a qualified approval of the AMA policy, subject to the development of local regulations and, of course, subject to the final ratification of all such plans by the association's House of Delegates next May during the annual meeting.

According to Doctor Johnson, the association committee does not intend to act in any arbitrary or hasty manner. "Our job is to make a thorough analysis of all facets of the problem, and to formulate carefully considered recommendations for the House of Delegates," he said.

"We are most sensitive to the views of all members of the association," he added, "and we are presently surveying the opinions of physicians who practice in areas where there are hospitals with dual or combined medical and osteopathic staffs. Any OSMA member is encouraged to communicate his views on the subject of M.D.-Osteopathic relations to the committee in care of the OSMA Executive Office, P.O. Box 18696, Oklahoma City.

Committee members are: Doctors Irwin Brown, Bob Rutledge, Lloyd Owens, Vernon Cushing, John Highland, Wendell Smith, Tom Sparks, James Tisdal, Tom Points, and Kelley West. □



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Dates, Sites Announced For 1965 Regional Postgraduate Courses

Last year, eight Regional Postgraduate Education Courses were held throughout the state during the months of January through April.

It was the fourth consecutive year that Regional Postgraduate Courses were successfully sponsored and conducted by the Oklahoma State Medical Association through its Council on Professional Education. In all, 266 physicians attended the study sessions—representing an 18 per cent attendance increase over 1963.

At the rate of two per month, the Regional Postgraduate Courses are held at decentralized meeting sites across the state and in an effort to conserve the physicians' time, they are scheduled in the late afternoon and evening.

The meetings begin at 4:30 p.m., with two hours of lecture, followed by dinner and another two-hour period of lecture and discussion. Faculty members from the University of Oklahoma Medical Center make the scientific presentations.

Each program is approved for four hours credit by the American Academy of General Practice. A registration fee of \$7.50 covers the complete scientific program as well as the dinner.

First Course: January 12th

The Oklahoma State Medical Association will officially kick off its fifth consecutive year for sponsoring the decentralized program series with the January 12th Postgraduate Education Course, to be held in Ada. The subject to be covered at the January 12th educational review will be on "The Blood."

R. R. Hannas, M.D., Chairman of the OSMA's Council on Professional Education and Irwin H. Brown, M.D., Chairman of the Department of Postgraduate Education, University of Oklahoma Medical Center, are in charge of the overall planning for the eight regional meetings.

According to Doctor Hannas, any members of the Oklahoma State

Medical Association may attend any of the offered courses. He cited that pre-registration may be made at the Oklahoma State Medical Association Executive Office for any of the courses by mailing a check in the amount of \$7.50 and indicating the location where the preferred course is being held.

Eight Courses Scheduled

In addition to the opening program, the remaining seven courses will be held on the following dates, with the corresponding subjects to be offered and, at the location indicated:

January 26th—"The Thyroid," Clinton-Sherman AFB;

February 16th—"The Ovaries," Lawton;

February 23rd—"The Ovaries," Ponca City;

March 23rd—"Small Intestine," Lake Murray Lodge;

March 30th—"The Blood," Woodward;

April 20th—"The Thyroid," Enid;

April 27th—"Small Intestine," Muskogee.

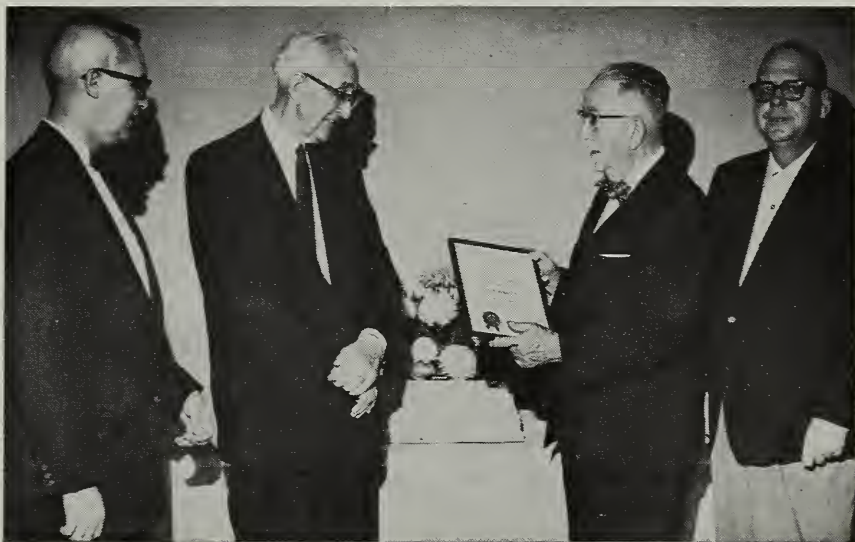
Assisting Doctor Hannas and Doctor Brown in planning the topics and organizing the speaking teams are the following O.U. faculty members: Jack D. Welsh, M.D.—"The Small Intestine"; James A. Merrill, M.D.—"The Ovaries"; Carl W. Smith, M.D.—"The Thyroid"; and Richard A. Marshall, M.D.—"The Blood."

Television Programs To Be Offered

While dates have not been confirmed, a series of eleven one-night-a-week televised Postgraduate Education Programs will be launched in January.

These programs are also sponsored by the OSMA and the Department of Postgraduate Education of the University of Oklahoma School of Medicine. Cost for underwriting the series is borne by the OSMA. Schedules will be announced in the January issue of *The Journal*. □

W. A. Howard M.D. Receives Award



Pioneer Chelsea physician, W. A. Howard, M.D., was honored on November 10th at the regular meeting of the Rogers-Mayes County Medical Society when the Oklahoma State Medical Association presented him with an Honorary-Life Membership Certificate in appreciation of his devoted service to the profession for over 50 years.

In addition to his activities in his county society, Doctor Howard served as president of the OSMA in 1939-40.

Presentation of the award was made by a long-time colleague, Forrest S. Etter, M.D., Bartlesville. Pictured above are Robert M. Stover, M.D., Claremore, county secretary, left; Doctor Howard, Doctor Etter and Minor E. Gordon, M.D., Claremore, county society president.

Crash Injury Program Selects New Study Area

On July 14th, 1963, the Board of Trustees of the Oklahoma State Medical Association endorsed an Automotive Crash Injury Research program sponsored by Cornell Aeronautical Laboratory, Inc. of Cornell University. Cooperating with Cornell in the program, in addition to the OSMA, are the Oklahoma State Highway Patrol, the Oklahoma State Health Department, and the Oklahoma Hospital Association.

The research study, which officially began January 1st, 1964, is scheduled to last two and one-half years from the date of inception. Taking two Oklahoma Highway Patrol Districts in a given six-month period of time and concentrating the study on the counties confined within the districts, the second six-month area study will be completed December 31st.

The third six-month phase of the program in Oklahoma will begin January 1st, 1965, and will be concentrated in the following counties: Canadian, Cleveland, Lincoln, Logan, McClain, Oklahoma, Pottawatomie, Craig, Delaware, Mayes, Nowata, Ottawa, Rogers and Washington.

The purpose of the Automotive Crash Injury Research program is to obtain reliable data on the frequency, nature, and specific causes of injury to occupants of passenger cars and trucks involved in accidents. Medical data submitted by physicians treating accident victims is matched with information on injury causes and accident data supplied by state patrol officers and is submitted to Cornell University, Buffalo, New York, for analysis and statistical tabulation.

The OSMA Council on Public Health under whose jurisdiction the research activity is coordinated, has been informed that data already collected from other cooperating states has served to guide automobile manufacturers in making important de-

FDA Enforces Drug Ad Law

The Food and Drug Administration has started enforcing the prescription drug advertising provisions of the new 1964 federal law.

Sales of ethical drugs are now exceeding \$2 billion a year in the United States. The Bureau of the Census reported ethical drug sales at \$2.05 billion in 1963, the first year that they had gone over the \$2 billion mark. The Pharmaceutical Manu-

sign changes, first introduced in 1956 model passenger cars, specifically engineered to provide protection during accidents. Reliable information being obtained on the degree of protection offered by seat belts, improved door latches, energy-absorbing steering wheels, padding, etc., is most encouraging the Council reports.

These studies, moreover, are producing medical statistics which promise to implement treatment of auto crash victims through more definitive knowledge of the nature and scope of the problem. The Trauma Committee of the American College of Surgeons has expressed great enthusiasm for this project.

According to Hayden H. Donahue, M.D., Chairman of the OSMA Council on Public Health, here is how the study is conducted. Wherever someone is injured or killed in an accident involving a passenger car or truck, the state patrolman investigating the accident will bring to the hospital, or private physician treating the victim, a special medical report form provided by Cornell inscribed with the patient's name. The attending physician will be requested to complete the form by recording specific information on the extent and nature of all injuries, no matter how minor.

"Prompt submission of medical reports will play an important part in the prevention of deaths or injuries resulting from auto accidents in the future," Doctor Donahue said. The chairman urges earnest participation in this effort aimed at solving one of the nation's foremost epidemiological problems. □

facturers Association's figure was \$2.39 billion.

The law requires that prescription drug advertisements show:

—The "established name" of the drug, if one exists, in type at least half as large as that used for the brand name;

—The drug's quantitative formula, and

—A true and non-misleading brief summary of information about adverse side effects, contraindications, and effectiveness of the drug for the guidance of physicians.

In enforcing these requirements, FDA said it would seek to determine whether a fair balance exists between the information on effectiveness and that on side effects and contraindications.

The FDA's Bureau of Medicine has started monitoring professional journal advertising for prescription drugs. It will forward violative advertisements with appropriate recommendations to the FDA Bureau of Regulatory Compliance.

Doctor Joseph F. Sadusk, Jr., Medical Director of FDA, said that it is the duty of physicians to keep fully informed of the composition, mode of action, efficacy and potential toxicity of drugs because as the potency of drugs increases, "so generally does their complexity and their potentiality for harm."

Violations of prescription drug advertising will be evaluated in two categories:

—Positive claims or omissions concerning the product which present potential danger to the patient in varying degrees. Examples include omission of some of the pertinent side effects, precautions or contraindications; improper statements about the effectiveness of, or indications for, the drug or antibiotic; omission of some of the information on various dosage forms, ingredients, or directions for use where required.

—Claims which may or may not involve danger to patient health but which, in the selling message, can seriously mislead as to the proper place of the drug or antibiotic in the total spectrum of products available for a disease situation. □

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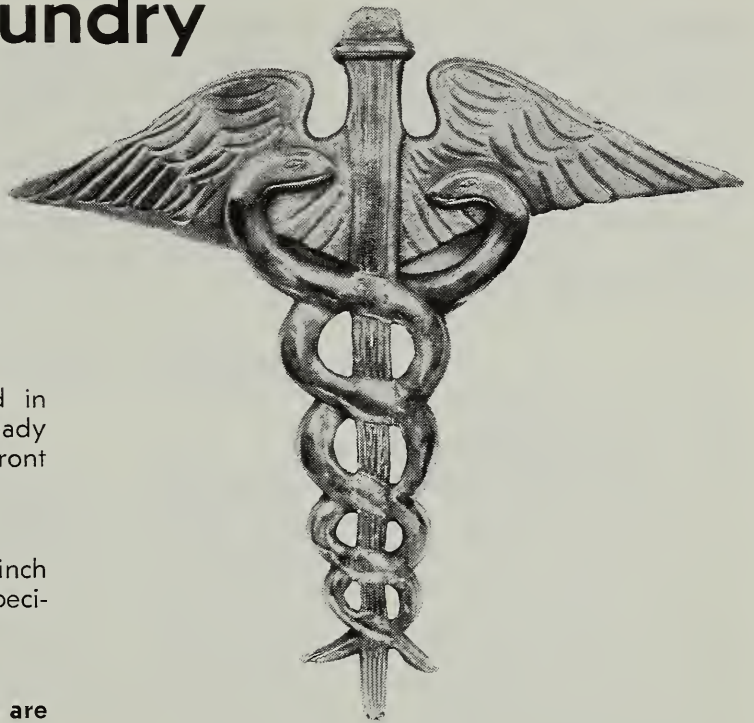
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DEATHS

WALTER H. DERSCH, SR., M.D.
1890-1964

Walter H. Dersch, Sr., M.D., 74-year-old Oklahoma City physician, died November 6th, 1964.

Born in Oregon, Missouri in 1890, Doctor Dersch graduated from the University of Oklahoma School of Medicine in 1917 where he became Assistant Professor of Medicine and later Professor Emeritus.

Active in the medical profession, he served as President of the Oklahoma County Medical Society in 1953.

Doctor Dersch was the father of Walter H. Dersch, Jr., M.D., of Shattuck, Oklahoma.

DELBERT O. SMITH, M.D.
1876-1964

An 88-year-old Tulsa internist, Delbert O. Smith, M.D., died in Tulsa November 6th, 1964.

Born in Aledo, Illinois, Doctor Smith was a graduate of the University of Kansas School of Medicine.

After practice in Kansas City, Kansas, he came to Tulsa in 1921 where he was in active practice until his retirement three years ago.

The Tulsa physician was a member of the American Society of Internal Medicine, the American Society of Bacteriology, the American Cancer Society and the American Heart Association.

In 1955, Doctor Smith was presented a Life Membership in the Oklahoma State Medical Association in appreciation for his years of service to the profession.

S. D. BEVILL, M.D.
1886-1964

S. D. Bevill, M.D., died in Poteau November 5th, 1964.

The 78-year-old physician was a 1911 graduate of the University of Arkansas School of Medicine. After practicing in Heavener, Oklahoma and Fort Smith, Arkansas, he established his practice in Poteau.

A veteran of World War I, Doctor Bevill was honored with the presentation of an Honorary-Life Membership in 1960 by the Oklahoma State Medical Association, in recognition of his fifty years of active practice and dedication to his profession.

JARRETT J. BILLINGTON, M.D.
1895-1964

Jarrett Jeffrey Billington, M.D., 69-year-old Stigler physician died in Stigler October 28th, 1964.

A native of Parks, Arkansas, Doctor Billington was a 1917 graduate of the University of Arkansas School of Medicine. Prior to the establishment of his practice in Stigler, in 1953, he had been in practice in Tulsa where he had served as superintendent of the Tulsa County Health Department since 1922.

He was a veteran of World War I and a member of the Oklahoma Chapter of the American Academy of General Practice □

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TINKER AFB, Oklahoma, has a vacancy for one medical officer, GS-13, \$14,595 per annum. This position is in the Occupational Health and Medical field and is strictly day shift, 40 hours per week, with no night calls. Doctors may continue private practice during off-duty hours as long as it does not interfere with their attendance and performance of duties at the base. They may not accept or continue employment resulting in payment from the City, County, State or other Federal Agencies due to dual compensation laws. Interested general practice, as well as Occupational Health physicians, should contact Tinker AFB, telephone PE 2-7321, Ext. 2691, for qualification requirements and other detailed information concerning this position.

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LOCATION WANTED: Oklahoma graduate, age 31, married, military obligation fulfilled, general practice experience. Will complete general surgery residency June 1965. Desire group or partnership practice. Contact Key G, The Journal, Oklahoma State Medical Association, P.O. Box 18696, Oklahoma City.

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Index to Contents

The use of this Index will be greatly facilitated by remembering that articles are often listed under more than one heading. Scientific articles may be found under the name of the author and the name of the article as well as under listings of authors and Scientific Articles. Editorials and deaths are listed under the special headings as well as alphabetically.

Pages Included in Each Issue

January	1-42	July	323-370
February	43-82	August	371-414
March	83-120	September	415-442
April	121-198	October	443-480
May	199-240	November	481-520
June	241-322	December	521-566

Key to Abbreviations

(S)—Scientific	(BR)—Book Review
(E)—Editorial	(D)—Deaths
(SA)—Special Article	(Pic)—Picture
(MC)—Medical Center	(GN)—General News

—A—

Abdominal Aortic Aneurysm As A Cause of Severe Gastrointestinal Bleeding, Steffen, H. Leland, M.D. (S)	139
Abstracts	31, 109, 149, 224, 266, 354, 397, 428, 460, 501, 539
Acute Arsenic Poisoning in Children, Alexander, Roy L., Jr., Ph.D. (S)	98
Adelson, Stephen J., M.D. (Pic)	517
AF Reserve Needs Doctors (GN)	475
The Air We Breathe; A Study of Man and His Environment, Massion, Walter H., M.D. (BR)	41
Alexander, Daniel J., M.D. (Pic)	517
Alexander, Lin, M.D. (D)	40
Alexander, Roy L., Jr., Ph.D., Acute Arsenic Poisoning in Children (S)	98

Alumni Association Honors Dean Derrais (GN)	520
Alumni Association Hosts Class of 1964 (GN)	362
AMA Delegates Duck Dues Increase at 113th Annual Convention (GN)	356
AMA Hits Medicare, Ducks Dues Increase (GN)	542
AMA President, Doctor Norman Welch, Dies of Stroke in Wyoming (GN)	433
AMA President-Elect Succeeds President (E)	482
Amebiasis, Mannerberg, Frederick D., M.D., Delashaw, John B., M.D., and Brandt, Edward N., Jr., M.D. (S)	25
An Approach to Tumors of the Lateral Nasal Wall, Snow, James B., Jr., M.D. (S)	203
Animal Species and Evolution and the Origin of Races, Brues, Alice M., Ph.D. (BR)	196

ANNUAL MEETING

Annual Meeting Highlights (GN)	268
Convention Officials (GN)	154
Delegates and Alternates (GN)	172
Digest of Events (GN)	155
Guest Speakers (GN)	159
House of Delegates (GN)	171
Officers and Trustees (GN)	153
President's Inaugural Dinner-Dance (GN)	170
Program (GN)	163
Program Participants (GN)	160
Related Meetings (GN)	169
Reports (GN)	175
Resolutions (GN)	183
Technical Exhibitors (GN)	167
Woman's Auxiliary (GN)	193
The Annual Meeting: Renaissance '64 (GN)	111
Annual Meeting Revised (E)	5
Areawide Planning Council For Hospitals and Related Health Facilities (E)	121
Areawide Planning for Hospitals and Related Health Facilities (E)	83
Areawide Planning Subject of Florida Conference (GN)	518
Armstrong, Mrs. Nolen (Pic)	117
Armstrong, Nolen, M.D. (Pic)	117

Association of Blood Banks to Meet in Oklahoma City (GN)	114
Attendance of Regional PG Courses Runs Far Ahead of 1963's (GN)	117
Automotive Crash Injury Study Underway in Oklahoma (GN)	117
Auxiliary (GN) (Feb.) xliii, (Mar.) xxxv, (May) xxxix, (June) xxxix, (July) xxxix, (Aug.) xxxvi, (Sept.) xliii, (Oct.) xliii, (Nov.) xlvii, (Dec.) xxxvii	

AUTHORS

Alexander, Roy L., Jr., Ph.D., Acute Arsenic Poisoning in Children (S)	98
Allison, John E., Ph.D., Textbook of Anatomy (BR)	41
Beargie, Robert A., M.D., and Kay, Jacob L., M.D., Evaluation of Newly Born Infants (S).....	389
Bloss, Claude M., Jr., M.D., Lindeman, Robert D., M.D. and Shaw, Russell F., M.D., Pulmonary Symptoms and Function in 4,922 Southeastern Oklahomans (S)	331
Boles, G. W., M.D., Kearns, H. J., M.D., Hallum, G. D., M.D., Wolfe, Ted W., M.D., and Coin, C. G., M.D., Echoencephalography (S)	484
Braden, Barbara, M.D., and Colmore, John P., M.D., Comparison of a New Sulfonamide and of Penicillin in the Treatment of Acute Streptococcal Pharyngitis (S)	7
Brake, Charles M., M.D., and Hinshaw, Lerner B., Ph.D., The Mechanism Of Endotoxin Shock (S)	421
Brandt, Edward N., Jr., M.D., Mannerberg, Frederick D., M.D., and Delashaw, John B., M.D., Amebiasis (S)	25
Brown, C. Alton, M.D., The Pancreas in Human and Experimental Diabetes (BR)	196
Brown, Mary, B.S., Hereditary Factors Associated With Coronary Artery Disease (S).....	100
Brues, Alice M., Ph. D., Animal Species and Evolution and The Origin of Races (BR).....	196
Campbell, Gilbert S., M.D., Snyder, David D., M.D., Felton, Warren L., II, M.D., Honick, Gerald L., M.D., and Price, William E., M.D., Subclavian Steal Syndrome (S).....	489
Campbell, Gilbert S., M.D., Williams, G. Rainey, M.D., Loughridge, B. P., M.D., and Price, W. E., M.D., Iliofemoral Vein Thrombosis (S)	143
Coin, C. G., M.D., Boles, G.W., M.D., Kearns, H. J., M.D., Hallum, G. D., M.D., and Wolfe, Ted W., M.D., Echoencephalography (S)	484
Colmore, John P., M.D., and Braden, Barbara, M.D., Comparison of a New Sulfonamide and of Penicillin in the Treatment of Acute Streptococcal Pharyngitis (S)	7

Delashaw, John B., M.D., Brandt, Edward N., Jr., M.D., and Mannerberg, Frederick D., M.D., Amebiasis (S)	25
Denniston, Joseph C., M.D., A New Approach in the Study of Mental Retardation (S).....	382
Derrick, John R., M.D., Control of Blood Pressure in the Surgical Patient (S)	261
Derrick, John R., M.D., Nephroptosis—A Possible Cause of Hypertension (S).....	95
Donat, P. E., M.D., Ginn, H. Earl, M.D., and Matter, B. J., M.D., Hypotremia (S).....	65
Dorwart, Fred, M.D., Cardiac Arrhythmia Associated With Preoperative Medication (S).....	16
Emmott, R. C., M.D., and Ingalls, J. M., M.D., Retroperitoneal Fibrosis (S)	342
Felton, Warren L., II, M.D., Honick, Gerald L., M.D., Price, William E., M.D., Campbell, Gilbert S., M.D., and Snyder, David D., M.D., Subclavian Steal Syndrome (S).....	489
Fisher, Pearl D., Ph.D., and Lowe, Robert C., M.D., The Family as the Unit of Health Care, Observations in A Rural State (S).....	129
Fisher, Robert Darryl, M.D., The Clinical and Physiological Role of Surface Active Materials in the Respiratory Distress Syndrome (S).....	530
Foertsch, J. H., M.D., F.A.C.P., A Possible New Therapeutic Approach for Salmonella Carrier (S)	449
Forester, Virgil Ray, M.D., The Sphincter of Oddi Syndrome (S).....	136
Freeman, Leon, Ph.D., Research Aspects of Heparin (S)	446
Garrison, George H., M.D., A Report on Blue Shield (SA)	504
Geyer, James R., M.D., Lymphangiography: Useful Adjunct in Evaluating Testicular Tumors (S)	327
Ginn, H. Earl, M.D., Matter, B. J., M.D., and Donat, P. E., M.D., Hypotremia (S)	65
Gist, Joel, Clinical and Laboratory Findings in Chronic Constrictive Pericarditis (S)	59
Haase, G. R., M.D., The Senile Brain: A Clinical Study (BR)	197
Haddy, Francis J., M.D., Ph.D., Mechanisms of Hypotension and Hypertension (S)	336
Hale, John M., Ph.D., and Lomanitz, Rachel, Enhanced Dissemination of Experimental Murine Cryptococcosis With Hodgkin's Serum (S)	104
Hallum, G. D., M.D., Wolfe, Ted W., M.D., Coin, C. G., M.D., Boles, G. W., M.D., and Kearns, H. J., M.D., Echoencephalography (S)	484
Hanlon, Thomas J., M.D., and Kent, Bartis M., M.D., A Case of Chronic Pancreatitis Without History of Pain (S).....	251
Hershiser, David and Pishkin, Vladimir, Ph.D., White Sound and Schizophrenics' Reaction to Stress (S).....	215

Hicks, Donald L., M.D., Renal Hypertension and Secondary Hyperaldosteronism (S)	62	Moss, Horace, M.D., and Morgan, Robert J., M.D., Creeping Eruption, Effectiveness of Thiabendazole Therapy (S)	207
Hinshaw, Lerner B., Ph.D., and Brake, Charles M., M.D., The Mechanism Of Endotoxin Shock (S)	421	Myers, William S., M.D., Robbins, Galen P., M.D., and Thompson, Wm. Best, M.D., The Radiocardiogram (S)	123
Honick, Gerald L., M.D., Price, William E., M.D., Campbell, Gilbert S., M.D., Snyder, David D., M.D., and Felton, Warren L., II, M.D., Subclavian Steal Syndrome (S)	489	Myers, William S., M.D., Thompson, Wm. Best, M.D., Robbins, Galen P., M.D., and Smith, Robert M., M.D., Management of Acute Pulmonary Embolism (S)	52
Ingalls, J. M., M.D., and Emmott, R. C., M.D., Retroperitoneal Fibrosis (S)	342	Naughton, John, M.D., Heart Page	398
Jones, Jenkin Lloyd, "You Gotta Have Heart" (SA)	463	Naughton, John, M.D., Heart Page	461
Kay, Jacob L., M.D., and Beargie, Robert A., M.D., Evaluation of Newly Born Infants (S)	389	Naughton, John, M.D., Heart Page	502
Kearns, H. J., M.D., Hallum, G. D., M.D., Wolfe, Ted W., M.D., Coin, C. G., M.D., Boles, G. W., M.D., Echoencephalography (S)	484	Naughton, John, M.D., Heart Page	540
Kent, Bartis M., M.D., and Hanlon, Thomas J., M.D., A Case of Chronic Pancreatitis Without History of Pain (S)	251	Olson, Robert L., M.D., Important Functions of the Mast Cell-Basophil Complex (S)	264
Knox, Gaylord S., M.D., How Often Are We Wrong: or The Epidemiology of Doctor Error (S)	494	Paredes, Alfonso, M.D., Crystallized Fear (S)	11
Knox, John M., M.D., The Destructive Force of Sunlight (S)	88	Parrish, Henry M., M.D., D.P.H., Ophidiiasis in Oklahoma (S)	254
Lindeman, Robert D., M.D., Shaw, Russell F., M.D., and Bloss, Claude M., Jr., M.D., Pulmonary Symptoms and Function in 4,922 Southeastern Oklahomans (S)	331	Pishkin, Vladimir, Ph.D., and Hershisser, David, White Sound and Schizophrenics' Reaction to Stress (S)	215
Lomanitz, Rachel and Hale, John M., Ph.D., Enhanced Dissemination of Experimental Murine Cryptococcosis With Hodgkin's Serum (S)	104	Price, W. E., M.D., Campbell, Gilbert S., M.D., Williams, G. Rainey, M.D., and Loughridge, B. P., M.D., Iliofemoral Vein Thrombosis (S)	143
Loughridge, B. P., M.D., Price, W. E., M.D., Campbell, Gilbert S., M.D., and Williams, G. Rainey, M.D., Iliofemoral Vein Thrombosis (S)	143	Price, William E., M.D., Campbell, Gilbert S., M.D., Snyder, David D., M.D., Felton, Warren L., II, M.D., and Honick, Gerald L., M.D., Subclavian Steal Syndrome (S)	489
Lowe, Robert C., M.D., and Fisher, Pearl D., Ph.D., The Family as the Unit of Health Care, Observations in a Rural State (S)	129	Puntenney, Mary E., M.D., Pheochromocytoma (S)	55
Maguire, Philip J., M.D., Residual Carcinoma In Situ (S)	419	Resler, Donald, M.D., The Management of Epistaxis (S)	19
Mannerberg, Frederick D., M.D., Delashaw, John B., M.D., and Brandt, Edward N., Jr., M.D., Amebiasis (S)	25	Reynolds, Joe Bills, M.D., Immunological Pregnancy Tests—Their Potentialities and Limitations (S)	245
Marshall, Richard A., M.D., The Red Cell: Production, Metabolism, Destruction: Normal and Abnormal (BR)	197	Ridings, G. Ray, M.D., Radiation Therapy for Carcinoma of the Cervix Uteri (S)	347
Massion, Walter H., M.D., The Air We Breathe: A Study of Man and His Environment (BR)	41	Riley, Harris D., Jr., M.D., Moderator, Brown Spider Bite with Severe Hemolytic Phenomena (S)	218
Matter, B. J., M.D., Donat, P. E., M.D., and Ginn, H. Earl, M.D., Hypotremia (S)	65	Robbins, Galen P., M.D., Smith, Robert M., M.D., Myers, William S., M.D., and Thompson, Wm. Best, M.D., Management of Acute Pulmonary Embolism (S)	52
Moore, Edward L., M.D., Necrosis of Stomach Wall Following Gastric Freezing, An Unusual Complication (S)	92	Robbins, Galen P., M.D., Thompson, Wm. Best, M.D., and Myers, William S., M.D., The Radiocardiogram (S)	123
Morgan, Robert J., M.D., and Moss, Horace, M.D., Creeping Eruption, Effectiveness of Thiabendazole Therapy (S)	207	Schottstaedt, M. F., M.D., The Family and Human Adaption (BR)	280
		Shaw, Russell F., M.D., Bloss, Claude M., Jr., M.D., and Lindeman, Robert D., M.D., Pulmonary Symptoms and Function in 4,922 Southeastern Oklahomans (S)	331
		Shaw, Russell, F., M.D., M.S. (Med), Incidence and Types of Poisonings in Childhood (S)	212
		Smith, Austin, M.D., The Cost of Professionalism (SA)	399
		Smith, Robert M., M.D., Myers, William S., M.D., Thompson, Wm. Best, M.D., and Robbins, Galen P., M.D., Management of Acute Pulmonary Embolism (S)	52

Snow, James B., Jr., M.D., An Approach to Tumors of the Lateral Nasal Wall (S)	203
Snyder, David D., M.D., Felton, Warren L., II, M.D., Honick, Gerald L., M.D., Price, William E., M.D., and Campbell, Gilbert S., M.D., Subclavian Steal Syndrome (S)	489
Staub, W. Arthur, M.D., Modern Concepts in the Control of Hypertension (S)	375
Steffen, H. Leland, M.D., Abdominal Aortic Aneurysm As A Cause of Severe Gastrointestinal Bleeding (S)	139
Steffen, H. Leland, M.D., The Ectopic Thyroid Gland (S)	385
Thompson, Wm. Best, M.D., Myers, William S., M.D., and Robbins, Galen P., M.D., The Radiocardiogram (S)	123
Thompson, Wm. Best, M.D., Robbins, Galen P., M.D., Smith, Robert M., M.D., and Myers, William S., M.D., Management of Acute Pulmonary Embolism (S)	52
Tucker, Richard P., MS IV, The Neuroanatomy of Recent Memory (S)	523
Williams, G. Rainey, M.D., Heart Page	355
Williams, G. Rainey, M.D., Loughridge, B. P., M.D., Price, W. E., M.D., and Campbell, Gilbert S., M.D., Iliofemoral Vein Thrombosis (S)	143
Wolfe, Ted W., M.D., Coin, C. G., M.D., Boles, G. W., M.D., Kearns, H. J., M.D., and Hallum, G. D., M.D., Echoencephalography (S)	484

—B—

Bassett, C. M., M.D. (Pic)	518
Beargie, Robert A., M.D., and Kay, Jacob L., M.D., Evaluation of Newly Born Infants (S)	389
Bevill, S. D., M.D. (D)	553
Billington, Jarrett J., M.D. (D)	553
Bingham, Hal. G., M.D. (Pic)	517
Bishop Named Associate Professor (GN)	369
Bloss, Claude M., Jr., M.D., Lindeman, Robert D., M.D., and Shaw, Russell F., M.D., Pulmonary Symptoms and Function in 4,922 Southeastern Oklahomans (S)	331
Blue Shield for Oklahoma Doctors (E)	24
Blue Shield Starts "Merit Rating" July 1st (GN)	366
Board of Trustees Proceedings (GN)	408
Board of Trustees Proceedings (GN)	512
Boles, G. W., M.D., Kearns, H. J., M.D., Hallum, G. D., M.D., Wolfe, Ted W., M.D., and Coin, C. G., M.D., Echoencephalography (S)	484
Bowles, Robert O. (Pic)	230
Braden, Barbara, M.D., and Colmore, John P., M.D., Comparison of a New Sulfonamide and of Penicillin in the Treatment of Acute Streptococcal Pharyngitis (S)	7
Brandt, Edward N., Jr., M.D., Mannerberg, Frederick D., M.D., and Delashaw, John B., M.D., Amebiasis (S)	25

Bricker, Earl M., M.D. (Pic)	154
Bricker, Earl M., Jr., M.D. (Pic)	160
Bricker, Mrs. Earl M., Jr. (Pic)	193
Bridges, Leroy (Pic)	406
Brogden, James C., M.D. (Pic)	514
Brown, Irwin H., M.D. (Pic)	154
Brown, Mary, B.S., Hereditary Factors Associated With Coronary Artery Disease (S)	100
Brown Spider Bite with Severe Hemolytic Phenomena, Riley, Harris D., Jr., M.D., Moderator (S)	218
Bussey, H. N., M.D. (Pic)	366

BOOK REVIEWS

The Air We Breathe; A Study of Man and His Environment, Massion, Walter H., M.D.	41
Animal Species and Evolution and The Origin of Races, Brues, Alice M., Ph.D.	196
The Family and Human Adaption, Schottstaedt, M. F., M.D.	280
The Pancreas in Human and Experimental Diabetes, Brown, C. Alton, M.D.	196
The Red Cell: Production, Metabolism, Destruction: Normal and Abnormal, Marshall, Richard A., M.D.	197
The Senile Brain: A Clinical Study, Haase, G. R., M.D.	197
The Skin: A Handbook, Everett, Mark A., M.D.	119
Strecker's Fundamentals of Psychiatry, Pierce, Chester M., M.D.	120
Synopsis of Neurology, Jabbour, J. T., M.D.	119
Textbook of Anatomy, Allison, John E., Ph.D.	41

—C—

Calhoon, Harold W., M.D. (Pic)	517
Campbell, Gilbert S., M.D. (Pic)	160
Campbell, Gilbert S., M.D., Snyder, David D., M.D., Felton, Warren L., II, M.D., Honick, Gerald L., M.D., and Price, William E., M.D., Subclavian Steal Syndrome (S)	489
Campbell, Gilbert S., M.D., Williams, G. Rainey, M.D., Loughridge, B. P., M.D., and Price, W. E. M.D., Iliofemoral Vein Thrombosis (S)	143
Cancer Group Clarifies Drug Program (GN)	477
Cardiac Arrhythmia Associated With Preoperative Medication, Dorwart, Fred, M.D. (S)	16
A Case of Chronic Pancreatitis Without History of Pain, Kent, Bartis M., M.D., and Hanlon, Thomas J., M.D. (S)	251
The Challenge of Treating Infants With Heart Failure (E)	443
Christman, Daniel E., M.D. (Pic)	517
Clements, Donald G., M.D. (Pic)	160
Clinical and Laboratory Findings in Chronic Constrictive Pericarditis, Gist, Joel (S)	59
The Clinical and Physiological Role of Surface Active Materials in the Respiratory Distress Syndrome, Fisher, Robert Darryl, M.D. (S)	530

Clymer, Cyril E., M.D. (D)	438
Coggins, Farris W., M.D. (Pic)	160
Coin, C. G., M.D., Boles, G. W., M.D., Kearns, H. J., M.D., Hallum, G. D., M.D., and Wolfe, Ted W., M.D., Echoencephalography (S)	484
Colmore, John P., M.D. (Pic)	160
Colmore, John P., M.D., and Braden, Barbara, M.D., Comparison of a New Sulfonamide and of Penicillin in the Treatment of Acute Streptococcal Pharyngitis (S)	7
Comparison of a New Sulfonamide and of Penicillin in the Treatment of Acute Streptococcal Pharyngitis, Braden, Barbara, M.D., and Colmore, John P., M.D. (S)	7
Congress on Mental Illness Scheduled (GN)	440
Continuing Education To Be Stressed at AMA Meeting (E)	482
Control of Blood Pressure in the Surgical Patient, Derrick, John R., M.D. (S)	261
The Cost of Professionalism, Smith, Austin, M.D. (SA)	399
County Medical Society Officers—1964 (GN)	235
Crash Injury Program Selects New Study Area (GN)	413
Crash Injury Program Selects New Study Area (GN)	552
Creeping Eruption, Effectiveness of Thiabendazole Therapy, Morgan, Robert J., M.D., and Moss, Horace, M.D. (S)	207
Cross, George L. (Pic)	411
Crosthwait, M. Joe, M.D. (Pic)	154
Crystallized Fear, Paredes, Alfonso, M.D. (S)	11
Curry, James Frank, M.D. (D)	40

—D—

Dates, Sites Announced For 1964 Regional Postgraduate Courses (GN)	38
Dates, Sites Announced For 1965 Regional Postgraduate Courses (GN)	551
Davidson, W. N., M.D. (Pic)	518
Davis, W. O., M.D. (Pic)	518
Dean, Robert W., M.D. (Pic)	160
Dean's Message	32, 72, 110, 150, 226, 267
Delashaw, John B., M.D., Brandt, Edward N., Jr., M.D., and Mannerberg, Frederick D., M.D., Amebiasis (S)	25
Delegates' Speaker Requests Volunteers and Resolutions (GN)	77
DeMougeot, William R. (Pic)	33
Dennehy, Timothy H., M.D. (Pic)	517
Dennis, James L., M.D. (Pic)	516
Dennis, Points Honored By Central State College (GN)	516
Dennis To Head OU Medical School (GN)	367
Denniston, Joseph C., M.D., A New Approach in the Study of Mental Retardation (S)	382
Derrick, John R., M.D., Control of Blood Pressure in the Surgical Patient (S)	261
Derrick, John R., M.D., Nephroptosis—A Possible Cause of Hypertension (S)	95

Dersch, Walter H., Sr. (D)	553
The Destructive Force of Sunlight, Knox, John M., M.D. (S)	88
DeTar, George A., M.D. (D)	516
Diabetes Week (GN)	472
Diggdon, Philip D., M.D. (Pic)	517
Doctor Brown Adviser On U.S. Welfare (GN)	475
Dr. A. A. Hellbaum (E)	444
Dolan, Gladys K., M.D. (D)	81
Donat, P. E., M.D., Ginn, H. Earl, M.D., and Matter, B. J., M.D., Hypotremia (S)	65
Dorwart, Fred, M.D., Cardiac Arrhythmia Associated With Preoperative Medication (S)	16
Duer, Joe L., M.D. (Pic)	153
Dunlap, Ernest B., M.D. (D)	119
D. W. Humphreys, M.D., Honored (GN)	518

DEATHS

Alexander, Lin, M.D.	40
Bevill, S. D., M.D.	553
Billington, Jarrett J., M.D.	553
Clymer, Cyril E., M.D.	438
Curry, James Frank, M.D.	40
Dersch, Walter H., Sr., M.D.	553
DeTar, George A., M.D.	516
Dolan, Gladys K., M.D.	81
Dunlap, Ernest B., M.D.	119
Fagin, Herman, M.D.	81
Flack, Frank L., M.D.	40
Gillespie, Clifton P., M.D.	81
Haas, Harry A., M.D.	81
Hamm, Silas G., M.D.	413
Hart, Marshall O., M.D.	238
Heerwagen, Paul K., Jr., M.D.	197
Hellbaum, Arthur A., M.D.	478
Hennessey, Howard L., M.D.	119
Huber, Walter A., M.D.	81
Hudson, Harry H., M.D.	367
Jones, Ralph E., M.D.	367
Jones, W. E., Sr., M.D.	279
Kinsinger, R. R., M.D.	40
Marshall, A. M., M.D.	197
Newman, Floyd S., M.D.	119
Orbin, Johnnie Andrew, M.D.	119
Patterson, James L., M.D.	413
Paul, Presse M., Jr., M.D.	279
Perry, Daniel L., M.D.	119
Pico, Lorenzo J., M.D.	238
Price, John T., M.D.	228
Reynolds, Ernest W., M.D.	119
Ritzhaupt, Louis H., M.D.	478
Roberts, T. R., M.D.	228
Ryan, Robert O., M.D.	81
Smith, Delbert O., M.D.	553
Smith, Leo L., M.D.	413

Stuart, Frank A., M.D.	197
Welborn, Orange E., M.D.	228
White, N. Stuart, M.D.	238
Yeargan, William M., M.D.	40

—E—

Echoencephalography, Wolfe, Ted W., M.D., Coin, C. G., M.D., Boles, G. W., M.D., Kearns, H. J., M.D., and Hallum, G. D., M.D. (S)	484
The Ectopic Thyroid Gland, Steffen, H. Leland, M.D. (S)	385
The Edge of Indigence (E)	415
Eighteen Medical Students Receive OSMA Loans (GN)	475
Emmott, R. C., M.D., and Ingalls, J. M., M.D., Retroperitoneal Fibrosis (S)	342
Enhanced Dissemination of Experimental Murine Cryptococcosis With Hodgkin's Serum, Hale, John M., Ph.D., and Lomanitz, Rachel (S)	104
Etter, Forrest S., M.D. (Pic)	551
Evaluation of Newly Born Infants, Kay, Jacob L., M.D. and Beargie, Robert A., M.D. (S)	389
Everett, Dean Mark R., Ph.D.	411
Everett, Mark A., M.D., The Skin: A Handbook (BR)	119
Experts To Review Computers' Role in Medicine at AMA Convention (GN)	279

EDITORIALS

AMA President-Elect Succeeds President	482
Annual Meeting Revised	5
Areawide Planning Council for Hospitals and Related Health Facilities	121
Areawide Planning for Hospitals and Related Health Facilities	83
Blue Shield for Oklahoma Doctors	24
The Challenge of Treating Infants With Heart Failure	443
Continuing Education To Be Stressed at AMA Meeting	482
Dr. A. A. Hellbaum	444
The Edge of Indigence	415
The General Practitioner's Resolve	86
"Heart Month"	51
"I Told You So!"	49
Ills, Skills and Frills	49
Important Meetings Set This Month For OSMA	5
Important Reading!!	43
Increasing Productivity	324
A Lesson in Socialism	243
Let's Get Together For A	199
Marshall O. Hart, M.D.	201
Medical Evidence for the Disability Decision	416
Mutual Aid	417
Patient Privacy Puzzles Publicity Pressed Physicians	241

A Pound of Prevention	374
President's Page 6, 87, 122, 202, 244, 326, 374, 418, 445	
The President Reports	373
R.D.—Respiratory Diseases	323
The Responsibility of Medicine's Leadership	49
Senator Louis H. Ritzhaupt, M.D.	444
Social Security for Physicians	371
Syphilitic Heart Disease	481
Thoughts on Medicare	84
Tulsan Delegate to BMA	121
Vocational Rehabilitation	372
What's Happened to the Blues?	242
What's Happened to Scientific Papers?	521
Will Medicine's Voice Be Silenced	243

—F—

Fagin, Herman, M.D. (D)	81
FDA Enforces Drug Ad Law (GN)	552
Federal Heart, Cancer and Stroke Centers Recommended (GN)	545
The Family and Human Adaption, Schottstaedt, M. F., M.D. (BR)	280
The Family as the Unit of Health Care, Observations in A Rural State, Lowe, Robert C., M.D., and Fisher, Pearl D., Ph.D. (S)	129
Felton, Warren L., II, M.D., Honick, Gerald L., M.D., Price, William E., M.D., Campbell, Gilbert S., M.D., and Snyder, David D., M.D., Subclavian Steal Syndrome (S)	489
Finney, W. D. (Pic)	477
Fisher, Pearl D., Ph.D., and Lowe, Robert C., M.D., The Family as the Unit of Health Care, Observations in A Rural State (S)	129
Fisher, Robert Darryl, M.D., The Clinical and Physiological Role of Surface Active Materials in the Respiratory Distress Syndrome (S)	530
Fite, W. Pat, Sr., M.D. (Pic)	517
Flack, Frank L., M.D. (D)	40
Foertsch, J. H., M.D., F.A.C.P., A Possible New Therapeutic Approach for Salmonella Carrier (S)	449
Forester, Virgil Ray, M.D., The Sphincter of Oddi Syndrome (S)	136
Foristel, James B. (Pic)	33
Frates, Rodman A. (Pic)	230
Frye, Powell, M.D. (Pic)	518

—G—

Gates, Aubrey D. (Pic)	33
Gathers, George, M.D. (Pic)	518
The General Practitioner's Resolve (E)	86
General Practitioners Meet in Tulsa (GN)	117
Geyer, James R., M.D., Lymphangiography: Useful Adjunct in Evaluating Testicular Tumors (S)	327
Gillespie, Clifton P., M.D. (D)	81
Ginn, H. Earl, M.D., Matter, B. J., M.D., and Donat, P. E., M.D., Hypotremia (S)	65

Gist, Joel, Clinical and Laboratory Findings in Chronic Constrictive Pericarditis (S)	59
Gordon, Minor E., M.D. (Pic)	551
Graduates Receive Intern Appointments (GN)	368
Graham, Hugh C., Jr., M.D. (Pic)	517
Green, Jess D., Jr., M.D. (Pic)	160
Gunn, C. G., M.D. (Pic)	160

—H—

Haas, Harry A., M.D. (D)	81
Haddy, Francis J., M.D. (Pic)	160
Haddy, Francis J., M.D., Ph.D., Mechanisms of Hypotension and Hypertension (S)	336
Hain, Raymond F., M.D. (Pic)	154
Hain, Raymond F., M.D. (Pic)	160
Hale, John M., Ph.D., and Lomanitz, Rachel, Enhanced Dissemination of Experimental Murine Cryptococcosis With Hodgkin's Serum (S)	104
Hall, Durward G., M.D. (Pic)	33
Hallum, G. D., M.D., Wolfe, Ted W., M.D., Coin, C. G., M.D., Boles, G. W., M.D., and Kearns H. J., M.D., Echoencephalography (S)	484
Hamm, Silas G., M.D. (D)	413
Hanlon, Thomas J., M.D., and Kent, Bartis M., M.D., A Case of Chronic Pancreatitis Without History of Pain (S)	251
Hannas, R. R., Jr., M.D. (Pic)	153
Hannas, R. R., Jr., M.D. (Pic)	154
Harrison, Gene H., M.D. (Pic)	517
Hart, Marshall O., M.D. (D)	238
Hartford, Walter K., M.D. (Pic)	160
"Health Protection Week" Set for April 12th-18th (GN)	111
Hearings Resumed on Medicare Bill (GN)	37
"Heart Month" (E)	51
Heart Page, edited by Harris D. Riley, Jr., M.D.	225
Heart Page, Naughton, John, M.D.	398
Heart Page, Naughton, John, M.D.	429
Heart Page, Naughton, John, M.D.	461
Heart Page, Naughton, John, M.D.	502
Heart Page, Naughton, John, M.D.	540
Heart Page, Williams, G. Rainey, M.D.	355
Heerwagen, Paul K., Jr., M.D. (D)	197
Hellbaum, Arthur A., M.D. (D)	478
Heller, Ben I., M.D. (Pic)	154
Heller, Ben I., M.D. (Pic)	160
Hennessey, Howard L., M.D. (D)	119
Henningsgaard, B. L. (Pic)	159
Hensley, Jess, M.D. (Pic)	160
Hereditary Factors Associated With Coronary Artery Disease, Brown, Mary, B.S. (S)	100
Hershiser, David and Pishkin, Vladimir, Ph.D., White Sound and Schizophrenics' Reaction to Stress (S)	215
Hicks, Donald L., M.D., Renal Hypertension and Secondary Hyperaldosteronism (S)	62

Highlights of Annual AMA Convention (GN)	232
Hinshaw, Lerner B., Ph.D., and Brake, Charles M., M.D., The Mechanism Of Endotoxin Shock (S)	421
Hollis, J. B., M.D. (Pic)	366
Honick, Gerald L., M.D., Price, William E., M.D., Campbell, Gilbert S., M.D., Snyder, David D., M.D., and Felton, Warren L., II, M.D., Subclavian Syndrome (S)	489
How Often Are We Wrong? or The Epidemiology of Doctor Error, Knox, Gaylord S., M.D. (S)	494
Howard, W. A., M.D. (Pic)	551
Huber, Walter A., M.D. (D)	81
Hudson, Harry H., M.D. (D)	367
Hudson, Margaret G., M.D. (Pic)	236
Humphreys, D. W., M.D. (Pic)	518
Hypotremia, Matter, B. J., M.D., Donat, P. E., M.D., and Ginn, H. Earl, M.D. (S)	65

—I—

Iliofemoral Vein Thrombosis, Williams, G. Rainey, M.D., Loughridge, B. P., M.D., Price, W. E., M.D., and Campbell, Gilbert S., M.D. (S)	143
Ills, Skills and Frills (E)	1
Immunological Pregnancy Tests — Their Potentialities and Limitations, Reynolds, Joe Bills, M.D. (S)	245
Important Functions of the Mast Cell-Basophil Complex, Olson, Robert L., M.D. (S)	264
Important Meetings Set This Month For OSMA (E) ..	5
Important Reading!! (E)	43
Incidence and Types of Poisonings in Childhood, Shaw, Russell F., M.D., M.S. (Med) (S)	212
Increasing Productivity (E)	324
Indoctrination Dinner Held by Tulsa County Medical Society (GN)	517
Ingalls, J. M., M.D., and Emmott, R. C., M.D., Retroperitoneal Fibrosis (S)	342
Internal Revenue Rules Against Professional Corporations (GN)	40
Ishler, George H., M.D. (Pic)	517

—J—

Jabbour, J. T., M.D., Synopsis of Neurology (BR) ..	119
Johnson, Mark R., M.D. (Pic)	153
Johnson Predicts Medicare Approval (GN)	520
Jones, Jenkin Lloyd, "You Gotta Have Heart" (SA) ..	463
Jones, Phyllis E., M.D. (Pic)	160
Jones, Ralph E., M.D. (D)	367
Jones, W. E., Sr., M.D. (D)	279
Jorjorian, Chaplain Armen (Pic)	159

—K—

Kalmon, E. H., M.D. (Pic)	154
Kalmon, E. H., M.D. (Pic)	160

index

Kearns, H. J., M.D., Hallum, G. D., M.D., Wolfe, Ted W., M.D., Coin, C. G., M.D., Boles, G. W., M.D., Echoencephalography (S)	484
Kent, Bartis M., M.D., and Hanlon, Thomas J., M.D., A Case of Chronic Pancreatitis Without History of Pain (S)	251
Kay, Jacob L., M.D., and Beargie, Robert A., M.D., Evaluation of Newly Born Infants (S)	389
Kinsinger, R. R., M.D. (D)	40
Kirkman Named Professor of Biochemistry (GN)	514
Knox, Gaylord S., M.D., How Often Are We Wrong: or The Epidemiology of Doctor Error (S)	494
Knox, John M., M.D., The Destructive Force of Sunlight (S)	88

-L-

Last Call for Resolutions (GN)	113
The Last Word (GN) (Feb.) xlv, (Mar.) xxxvi, May) xl, (June) xl, (July) xl, (Aug.) xxxviii, (Sept.) xlv, (Oct.) xlv, (Nov.) xlviii, (Dec.) xxxviii	
Let's Get Together For A (E)	199
Liability Conferences Popularly Received (GN)	547
Limit Sabin To Children: Surgeon General (GN)	474
Lindeman, Robert D., M.D., Shaw, Russell F., M.D., and Bloss, Claude M., Jr., M.D., Pulmonary Symptoms and Function in 4,922 Southeastern Oklahomans (S)	331
Lomanitz, Rachel and Hale, John M., Ph.D., Enhanced Dissemination of Experimental Murine Cryptococcosis With Hodgkin's Serum (S)	194
Loughridge, B. P., M.D., Price, W. E., M.D., Campbell, Gilbert S., M.D., and Williams, G. Rainey, M.D., Iliofemoral Vein Thrombosis (S)	143
Lowe, Robert C., M.D., and Fisher, Pearl D., Ph.D., The Family as the Unit of Health Care, Observations in A Rural State (S)	129
Lowrey, Robert W., M.D. (Pic)	362
Lowrey, Mrs. Robert W. (Pic)	362
Lymphangiography: Useful Adjunct in Evaluating Testicular Tumors, Geyer, James R., M.D. (S)	327

-M-

McCarty, J. D. (Pic)	33
McCleave, Rev. Dr. Paul B. (Pic)	159
McCreight, William G., M.D. (Pic)	160
McGregor, Mrs. F. H. (Pic)	193
Mabry, E. W., M.D. (Pic)	366
Maguire, Philip J., M.D., Residual Carcinoma In Situ (S)	419
Management of Acute Pulmonary Embolism, Myers, William S., M.D., Thompson, Wm. Best, M.D., Robbins, Galen P., M.D., and Smith, Robert M., M.D. (S)	52
The Management of Epistaxis, Resler, Donald R., M.D. (S)	19

Mannerberg, Frederick D., M.D., Delashaw, John B., M.D., and Brandt, Edward N., Jr., M.D., Amebiasis (S)	25
Marshall, A. M., M.D. (D)	197
Marshall O. Hart, M.D. (E)	201
Martin, E. O., M.D. (Pic)	518
Martin, J. W., M.D. (Pic)	518
Martin, James D., M.D. (Pic)	518
Matter, B. J., M.D., Donat, P. E., M.D., and Ginn, H. Earl, M.D., Hypotremia (S)	65
Mays, William G., M.D. (Pic)	517
The Mechanism Of Endotoxin Shock, Hinshaw, Lerner B., Ph.D., and Brake, Charles M., M.D. (S)	421
Mechanisms of Hypotension and Hypertension, Hadley, Francis J., M.D., Ph.D. (S)	336
Medical Center Names First Professor of Child Psychiatry (GN)	517
Medical Center Names New Pathology Professor (GN)	519
Medical Evidence for the Disability Decision (E)	416
Medicare Dumped By Ways and Means Group (GN)	361
Medicare 1964—Held on One-Yard Line (GN)	469
Memorial Symposium To Be Held in Tulsa (GN)	437
Merifield, David O., M.D. (Pic)	517
Miami Beach Plays Host To AMA Clinical Convention (GN)	440
Miscellaneous Advertisements (GN) 42, 120, 198, 281, 369, 414, 442, 480, xvii, 554	
Modern Concepts in the Control of Hypertension, Staub, W. Arthur, M.D. (S)	375
Mohler, E. C., M.D. (Pic)	477
Mohler Honored By Heart Association (GN)	477
Moore, C. W., M.D. (Pic)	518
Moore, Edward L., M.D., Necrosis of Stomach Wall Following Gastric Freezing, An Unusual Complication (S)	92
Morgan, Robert J., M.D., and Moss, Horace, M.D., Creeping Eruption, Effectiveness of Thiabendazole Therapy (S)	207
Moss, Horace, M.D., and Morgan, Robert J., M.D., Creeping Eruption, Effectiveness of Thiabendazole Therapy (S)	207
Mutual Aid (E)	417
Myers, William S., M.D., Robbins, Galen P., M.D., and Thompson, Wm. Best, M.D., The Radiocardiogram (S)	123
Myers, William S., M.D., Thompson, Wm. Best, M.D., Robbins, Galen P., M.D., and Smith, Robert M., M.D., Management of Acute Pulmonary Embolism (S)	52

-N-

Naughton, John, M.D., Heart Page	398
Naughton, John, M.D., Heart Page	429
Necrosis of Stomach Wall Following Gastric Freezing, An Unusual Complication, Moore, Edward L., M.D. (S)	92
Nelson, Arnold G., M.D. (Pic)	117

Nelson, Mrs. Arnold (Pic)	117
Nephroptosis — A Possible Cause of Hypertension, Derrick, John R., M.D. (S)	95
The Neuroanatomy of Recent Memory. Tucker, Richard P., MS IV (S)	523
A New Approach in the Study of Mental Retarda- tion, Denniston, Joseph C., M.D. (S)	382
Newman, Floyd S., M.D. (D)	119
Nix, Thomas E., M.D. (Pic)	154
Nix, Thomas E., M.D. (Pic)	161

—O—

Officers and Trustees (GN)	365
Officers, Mental Health Meetings Attract 250 (GN) ..	74
OHA To Hold Annual Sceentific Session (GN)	359
Oklahoma Chapter of AAGP to Meet in Tulsa (GN) ..	38
Oklahoma Chapter of ACS Will Meet in February (GN)	75
Oklahoma Plastic Surgeons Organize (GN)	114
Oklahoma Rheumatism Society To Hold Annual Meeting (GN)	435
Oklahoma Senators Visited (GN)	411
Oklahoma's Mental Health Survey Nearing Comple- tion (GN)	470
Olson, Robert L., M.D., Important Functions of the Mast Cell-Basophil Complex (S)	264
OMPAC-AMPAC Move Forward (GN)	406
"Operation Waiting-Room" Produces 10,000 Letters A Day! (GN)	115
Ophidiiasis in Oklahoma, Parrish, Henry M., M.D., D.P.H. (S)	254
Orbin, Johnnie Andrew, M.D. (D)	119
OSMA Awards Medical School Scholarships (GN)	434
OSMA-Blue Shield Trustees to Meet (GN)	544
OSMA Committee on Immunization Created (GN)	435
OSMA Community Service Award (GN)	519
OSMA Conference Launches New Medicare Cam- paign (GN)	73
OSMA Disability Insurance Is National Paceset- ter (GN)	230
OSMA Honors Five Tulsa Physicians (GN)	514
OSMA Life Insurance Program Tops Competing Plans (GN)	227
OSMA Looks at New Legislature, Anticipated Legis- lation (GN)	510
OSMA Opposes U.S. Chamber's OASI Stand (GN) ..	544
OSMA Program Features Twelve Priority Projects (GN)	358
OSMA To Host Regional AMA Conference on Ag- ing (GN)	366
OSMA To Host Six-State Conference on Aging and Long-Term Care (GN)	412
Osteopathy Committee Explores Interprofessional Relations (GN)	549
Osteopathic Relations Studied by Committee (GN) ..	549
O.U. Medical School Accepts 106 Students For Fall Term (GN)	239

—P—

The Pancreas in Human and Experimental Diabetes, Brown, C. Alton, M.D. (BR)	196
Papilledema: Diagnosis and Differential Diagnosis, Muenzler, W. S., M.D. (S)	454
Paredes, Alfonso, M.D., Crystallized Fear (S)	11
Parker, Mrs. Joe M. (Pic)	193
Parrish, Henry M., M.D., D.P.H., Ophidiiasis in Oklahoma (S)	254
Participation in Regional Postgraduate Courses Shows Gain Over 1963's (GN)	74
Patient Privacy Puzzles Publicity Pressed Physicians (E)	241
Patterson, James L., M.D. (D)	413
Paul, Presse M., Jr., M.D. (D)	279
Peden, James C., M.D. (Pic)	514
Perry, Daniel L., M.D. (D)	119
Perry, Harold O., M.D. (Pic)	159
Phelps Testifies Against Medicare (GN)	440
Pheochromocytoma, Puntteney, Mary E., M.D. (S) ..	55
Pico, Lorenzo J, M.D., (D)	238
Pierce, Chester M., M.D., Strecker's Fundamentals of Psychiatry (BR)	120
Pishkin, Vladimir, Ph.D., and Hershisier, David, White Sound and Schizophrenics' Reaction to Stress (S)	215
Points, Thomas C., M.D. (Pic)	516
Pontotoc Society Inaugurates Annual Postgraduate Course (GN)	77
A Possible New Therapeutic Approach for Salmonel- la Carrier, Foertsch, J. H., M.D., F.A.C.P. (S) ..	449
A Pound of Prevention (E)	374
President's Page (E) 6, 122, 202, 244, 326, 374, 418, 445	
The President Reports (E)	373
Price, John T., M.D. (D)	228
Price, W. E., M.D., Campbell, Gilbert S., M.D., Williams, G. Rainey, M.D., and Loughridge, B. P., M.D., Iliofemoral Vein Thrombosis (S) ..	143
Price, William E., M.D., Campbell, Gilbert S., M.D., Snyder, David D., M.D., Felton, Warren, L., II, M.D., and Honick, Gerald L., M.D., Sub- clavian Steal Syndrome (S)	489
Proceedings of the 58th Session of the House of Delegates (GN)	277
Professional Liability Conference Held (GN)	115
Professional Liability Conferences Planned (GN) ..	435
Pulmonary Symptoms and Function in 4,922 South- eastern Oklahomans, Lindeman, Robert D., M.D., Shaw, Russell F., M.D., and Bloss, Claude M., Jr., M.D. (S)	331
Puntteney, Mary E., M.D., Pheochromocytoma (S) ..	55

—R—

Rader, Lloyd E. (Pic)	33
Radiation Therapy for Carcinoma of the Cervix Uteri, Ridings, G. Ray, M.D. (S)	347

index

The Radiocardiogram, Robbins, Galen P., M.D., Thompson, Wm. Best, M.D., and Myers, William S., M.D. (S)	123
R.D.—Respiratory Diseases (E)	323
The Red Cell: Production, Metabolism, Destruction: Normal and Abnormal, Marshall, Richard A., M.D. (BR)	197
Regional, National Meetings Scheduled For Oklahoma City Next Month (GN)	432
Reichman, Joe (Pic)	113
Renal Hypertension and Secondary Hyperaldosteronism, Hicks, Donald L., M.D. (S)	62
A Report on Blue Shield, Garrison, George H., M.D. (SA)	504
Research Aspects of Heparin, Freeman, Leon, Ph.D. (S)	446
Residual Carcinoma In Situ, Maguire, Philip J., M.D. (S)	419
Resler, Donald, M.D., The Management of Epistaxis (S)	19
The Responsibility of Medicine's Leadership (E)	49
Retiring Dean Honored (GN)	411
Retroperitoneal Fibrosis, Ingalls, J. M., M.D., and Emmott, R. C., M.D. (S)	342
Reynolds, Ernest W., M.D. (D)	119
Reynolds, Joe Bills, M.D., Immunological Pregnancy Tests — Their Potentialities and Limitations (S)	245
Ridings, G. Ray, M.D., Radiation Therapy for Carcinoma of the Cervix Uteri (S)	347
Riley, Harris D., Jr., M.D., Moderator, Brown Spider Bite with Severe Hemolytic Phenomena (S)	218
Ritt, Albert, M.D. (Pic)	117
Ritzhaupt, Louis H., M.D. (D)	478
Ritzhaupt Proposes New Health Facilities (GN)	478
Robbins, Galen P., M.D., Smith, Robert M., M.D., Myers, William S., M.D., and Thompson, Wm. Best, M.D., Management of Acute Pulmonary Embolism (S)	52
Robbins, Galen P., M.D., Thompson, Wm. Best, M.D., and Myers, William S., M.D., The Radiocardiogram (S)	123
Roberts, T. R., M.D. (D)	228
Robertson, J. David, M.D. (Pic)	159
Rocky Mountain Cancer Conference in Denver (GN)	236
Rohrer, G. Victor, M.D. (Pic)	161
Rounsaville, Robert T., M.D. (Pic)	517
Rouse, Milford O., M.D. (Pic)	159
Ryan, Robert O., M.D. (D)	81

—5—

Samuel Goodman Memorial Symposium To Be Held in Tulsa (GN)	410
Scroggins, Clayton L. (Pic)	159
Senator Louis H. Ritzhaupt, M.D. (E)	444
The Senile Brain: A Clinical Study, Haase, G. R., M.D. (BR)	197

Senior Medical Students Honored (GN)	359
Shaw, Russell F., M.D., Bloss, Claude M., Jr., M.D., and Lindeman, Robert D., M.D., Pulmonary Symptoms and Function in 4,922 Southeastern Oklahomans (S)	331
Shaw, Russell F., M.D., M.S. (Med), Incidence and Types of Poisonings in Childhood (S)	212
Shepard, Robert M., Sr., M.D. (Pic)	236
Shepard, Robert M., Sr., M.D. (Pic)	514
Shirkey, Albert L., M.D. (Pic)	517
Shopfner, Charles E., M.D. (Pic)	161
The Skin: A Handbook, Everett, Mark A., M.D. (BR)	119
Smith, Austin, M.D., The Cost of Professionalism (SA)	399
Smith, Delbert O., M.D. (D)	553
Smith, G. R., M.D. (Pic)	518
Smith, Leo L., M.D. (D)	413
Smith, Robert G., M.D. (Pic)	517
Smith, W. O., M.D. (Pic)	161
Snow, James B., Jr., M.D., An Approach to Tumors of the Lateral Nasal Wall (S)	203
Snyder, David D., M.D., Felton, Warren L., II, M.D., Honick, Gerald L., M.D., Price, William E., M.D., and Campbell, Gilbert S., M.D., Subclavian Steal Syndrome (S)	489
Social Security for Physicians (E)	371
Southern Medical Association Meets in November (GN)	477
Sparks, Mrs. Tom C. (Pic)	193
Speakers Named For Oklahoma City Clinical Society (GN)	433
The Spinicter of Oddi Syndrome, Forester, Virgil Ray, M.D. (S)	136
Stanley, M. V., M.D. (Pic)	514
Starkey, Wayne A., M.D.	411
Starr, O. W., M.D. (Pic)	518
Statement of Ownership	480
Staub, W. Arthur, M.D., Modern Concepts in the Control of Hypertension (S)	375
Steffen, H. Leland, M.D., Abdominal Aortic Aneurysm As A Cause of Severe Gastrointestinal Bleeding (S)	139
Steffen, H. Leland, M.D., The Ectopic Thyroid Gland (S)	385
Stover, Robert M., M.D. (Pic)	551
Stover, Mrs. Robert M. (Pic)	193
Strecker's Fundamentals of Psychiatry, Pierce, Chester M., M.D. (BR)	120
"Stroke Congress" Set For Chicago Next Month (GN)	438
Strong, C. Riley, M.D. (Pic)	117
Strong, Mrs. C. Riley (Pic)	117
Stuart, Frank A., M.D. (D)	197
Student AMA Banquet Slated October 16th (GN)	478
Subclavian Steal Syndrome, Snyder, David D., M.D., Felton, Warren L., II, M.D., Honick, Gerald L., M.D., Price, William E., M.D., and Campbell, Gilbert S., M.D. (S)	489

Survey To Test Performance of Oklahoma Blue Shield (GN)	279
Swanson, Karl F., M.D. (Pic)	514
Synopsis of Neurology, Jabbour, J. T., M.D. (BR)	119
Syphilitic Heart Disease (E)	481

SCIENTIFIC ARTICLES

Abdominal Aortic Aneurysm As A Cause of Severe Gastrointestinal Bleeding, Steffen, H. Leland, M.D.	139
Acute Arsenic Poisoning in Children, Alexander, Roy L., Jr., Ph.D.	98
Amebiasis, Mannerberg, Frederick D., M.D., Delashaw, John B., M.D., and Brandt, Edward N., Jr., M.D.	25
An Approach to Tumors of the Lateral Nasal Wall, Snow, James B., Jr., M.D.	203
Brown Spider Bite with Severe Hemolytic Phenomena, Riley, Harris D., Jr., M.D., Moderator	218
Cardiac Arrhythmia Associated With Preoperative Medication, Dorwart, Fred, M.D.	16
A Case of Chronic Pancreatitis Without History of Pain, Kent, Bartis M., M.D. and Hanlon, Thomas J., M.D.	251
Clinical and Laboratory Findings in Chronic Constrictive Pericarditis, Gist, Joel	59
The Clinical and Physiological Role of Surface Active Materials in the Respiratory Distress Syndrome, Fisher, Robert Darryl, M.D.	530
Comparison of a New Sulfonamide and of Penicillin in the Treatment of Acute Streptococcal Pharyngitis, Braden, Barbara, M.D., and Colmore, John P., M.D.	7
Control of Blood Pressure in the Surgical Patient, Derrick, John R., M.D.	261
Creeping Eruption, Effectiveness of Thiabendazole Therapy, Morgan, Robert J., M.D., and Moss, Horace B., M.D.	207
Crystallized Fear, Paredes, Alfonso, M.D.	11
The Destructive Force of Sunlight, Knox, John M., M.D.	88
Echoencephalography, Wolfe, Ted W., M.D., Coin, C. G., M.D., Boles, G. W., M.D., Kearns, H. J., M.D., and Hallum, G. D., M.D.	484
The Ectopic Thyroid Gland, Steffen, H. Leland, M.D.	385
Enhanced Dissemination of Experimental Murine Cryptococcosis With Hodgkin's Serum, Hale, John M., Ph.D., and Lomanitz, Rachel	104
Evaluation of Newly Born Infants, Kay, Jacob L., M.D., and Beargie, Robert A., M.D.	389
The Family as the Unit of Health Care, Observations in A Rural State, Lowe, Robert C., M.D., and Fisher, Pearl D., Ph.D.	129
Hereditary Factors Associated With Coronary Artery Disease, Brown, Mary, B.S.	100

How Often Are We Wrong? or The Epidemiology of Doctor Error, Knox, Gaylord S., M.D.	494
Hypotremia, Matter, B. J., M.D., Donat, P. E., M.D., and Ginn, H. Earl, M.D.	65
Iliofemoral Vein Thrombosis, Williams, G. Rainey, M.D., Loughridge, B. P., M.D., Price, W. E., M.D., and Campbell, Gilbert S., M.D.	143
Immunological Pregnancy Tests — Their Potentialities and Limitations, Reynolds, Joe Bills, M.D.	245
Important Functions of the Mast Cell-Basophil Complex, Olson, Robert L., M.D.	264
Incidence and Types of Poisonings in Childhood, Shaw, Russell F., M.D., M.S. (Med)	212
Lymphangiography: Useful Adjunct in Evaluating Testicular Tumors, Geyer, James R., M.D.	327
Management of Acute Pulmonary Embolism, Myers, William S., M.D., Thompson, Wm. Best, M.D., Robbins, Galen P., M.D., and Smith, Robert M., M.D.	52
The Management of Epistaxis, Resler, Donald R., M.D.	19
The Mechanism Of Endotoxin Shock, Hinshaw, Lerner B., Ph.D. and Brake, Charles M., M.D.	421
Mechanisms of Hypotension and Hypertension, Haddy, Francis J., M.D., Ph.D.	336
Modern Concepts in the Control of Hypertension, Staub, W. Arthur, M.D.	375
Necrosis of Stomach Wall Following Gastric Freezing, An Unusual Complication, Moore, Edward L., M.D.	92
Nephroptosis — A Possible Cause of Hypertension, Derrick, John R., M.D.	95
The Neuroanatomy of Recent Memory, Tucker, Richard P., MS IV	523
A New Approach in the Study of Mental Retardation, Denniston, Joseph C., M.D.	382
Ophidiiasis in Oklahoma, Parrish, Henry M., M.D., D.P.H.	254
Papilledema: Diagnosis and Differential Diagnosis, Muenzler, W. S., M.D.	454
Pheochromocytoma, Puntenney, Mary E., M.D.	55
A Possible New Therapeutic Approach for Salmonella Carrier, Foertsch, J. H., M.D., F.A.C.P.	449
Pulmonary Symptoms and Function in 4,922 Southeastern Oklahomans, Lindeman, Robert D., M.D., Shaw, Russell F., M.D. and Bloss, Claude M., Jr., M.D.	331
Radiation Therapy for Carcinoma of the Cervix Uteri, Ridings, G. Ray, M.D.	347
The Radiocardiogram, Robbins, Galen P., M.D., Thompson, Wm. Best, M.D., and Myers, William S., M.D.	123
Renal Hypertension and Secondary Hyperaldosteronism, Hicks, Donald L., M.D.	62
Research Aspects of Heparin, Freeman, Leon, Ph.D.	446

index

Residual Carcinoma In Situ, Maguire, Philip J., M.D.	419
Retroperitoneal Fibrosis, Ingalls, J. M., M.D., and Emmott, R. C., M.D.	342
The Sphincter of Oddi Syndrome, Forester, Virgil Ray, M.D.	136
Subclavian Steal Syndrome, Snyder, David D., M.D., Felton, Warren L., II, M.D., Honick, Gerald L., M.D., Price, William E., M.D., and Campbell, Gilbert S., M.D.	489
White Sound and Schizophrenics' Reaction to Stress, Pishkin, Vladimir, Ph.D., and Hershiser, David	215

SPECIAL ARTICLES

The Cost of Professionalism, Smith, Austin, M.D.	399
A Report on Blue Shield, Garrison, George H., M.D.	504
"You Gotta Have Heart," Jones, Jenkin Lloyd	463

-T-

Taylor, Thomas, M.D. (Pic)	117
Taylor, Mrs. Thomas (Pic)	117
Textbook of Anatomy, Allison, John E., Ph.D., (BR)	41
Therapy of Shock Is Topic For November Symposium (GN)	475
Thomas, Harlan, M.D. (Pic)	153
Thomas, Harlan, M.D. (Pic)	362
Thomas, Harlan, M.D. (Pic)	514
Thomas, Mrs. Harlan (Pic)	362
Thomas Names Councils, Committees (GN)	274
Thompson, Webb M., M.D. (Pic)	161
Thompson, Wm. Best, M.D., Myers, William S., M.D., and Robbins, Galen P., M.D., The Radiocardiogram (S)	123
Thompson, Wm. Best, M.D., Robbins, Galen P., M.D., Smith, Robert M., M.D., and Myers, William S., M.D., Management of Acute Pulmonary Embolism (S)	52
Thorp, E. M., M.D. (Pic)	518
Thoughts on Medicare (E)	84
Three Department Heads Appointed at OU (GN)	369
Three Jackson County Physicians Honored (GN)	366
Top Band Booked For Annual Meeting (GN)	39
Traub, Sidney, M.D. (Pic)	161

Trustees to Meet July 26th (GN)	362
Trustees to Meet On March 22nd (GN)	118
Tucker Named AOA President (GN)	519
Tucker, Richard P., MS IV. The Neuroanatomy of Recent Memory (S)	523
Tulsa Assembly Center Picked For 1965 OSMA Annual Meeting (GN)	361
Tulsa Medical Society Awards Ten Scholarships (GN)	407
Tulsa, Oklahoma County Societies Move To New Headquarters (GN)	364
Tulsan Delegate to BMA (E)	121
Twelve Points Stressed For 1964-65 Program (GN)	269
Two Tulsa Doctors Honored (GN)	236
Two Weekend Conferences Begin New Year (GN)	33

-V-

Violett, Theodore W., M.D. (Pic)	161
Vocational Rehabilitation (E)	372

-W-

W. A. Howard, M.D., Receives Award (GN)	551
Ward, Donovan F., M.D. (Pic)	478
Welborn, Orange E., M.D. (D)	228
Welch, Norman A., M.D. (Pic)	433
What's Happened to Scientific Papers? (E)	521
What's Happened to the Blues? (E)	242
White, Joseph M., M.D. (Pic)	161
White, N. Stuart, M.D. (D)	238
White Sound and Schizophrenics' Reaction to Stress, Pishkin, Vladimir, Ph.D., and Hershiser, David (S)	215
Wilkinson To Address AMA Meeting (GN)	437
Will Medicine's Voice Be Silenced (E)	243
Williams, G. Rainey, M.D., Heart Page	355
Williams, G. Rainey, M.D., Loughridge, B. P., M.D., Price, W. E., M.D., and Campbell, Gilbert S., M.D., Iliofemoral Vein Thrombosis (S)	143
Wilson, Walter C. (Pic)	227
Witt, Mrs. Richard E., (Pic)	193

-Y-

Yeargan, William M., M.D. (D)	40
"You Gotta Have Heart," Jones, Jenkin Lloyd (SA)	463
York, Mrs. J. F. (Pic)	193

Among the many interesting accounts of county medical society auxiliaries being received was that of the Muskogee-Sequoyah-Wagoner group sent in by Mrs. M. C. Gephardt of Muskogee. This chapter was organized on March 24th, 1948, with a membership of 35 in Muskogee, one in Coweta, one in Sallisaw, three in Wagoner, one in Haskell, and one in Talihina. Two of the objectives of that first year have been carried through in the years that followed. These were helping girls interested in nursing as a career and obtaining wide coverage of the magazine, *Today's Health*. During this first year the Auxiliary sponsored the Red Cross Home Nursing Classes and Doctor's Day was celebrated.

In 1950, with the inclusion of McIntosh County, the organization became known as the Auxiliary to the East Central Oklahoma Medical Society.

A fashion show in 1954 and 1955 supplied money for contributions to the Nurses' Loan Fund and the Medical Education Fund. An award pin was given each year to the outstanding graduating nurse of the nursing schools of General and Baptist Hospitals.

In 1956, disaster survival and civil defense were added to the program.

By 1957, there were 44 active members. During that year a loan was made to a local girl for her expenses for nurses training. The auxiliary became a member of the Safety Council and the Community Council. A six-week course, "Yardstick for Young Career Girls" for student nurses at Baptist Hospital was sponsored by the auxiliary in 1958 and 1959. The Future Nurses Club, sponsored by the auxiliary, won top award at the state convention for their project of furnishing and staffing a sick room at Central High School. The yearly project of sending refreshments and prizes for the

Senior Citizens' meeting was started by the auxiliary.

In 1960-61 the State President, Mrs. Pat Fite, Sr., was a member of this group and was state chairman for mental health. This year an award was received for being the first auxiliary in the state to reach the goal of a contribution equal to five dollars per capita for AMA-ERF. National recognition was received for a "Write Your Congressman" coffee. The Future Nurses Club was changed to Health Careers Club and 112 members and interested young people attended a full day's activities at General Hospital.

In 1962, Mrs. Fite was chairman of the Heart Drive and she and other members of the auxiliary received compliments from the State Heart Association. East Central was also given an award for their hobby exhibit at the state convention. They also received honorable mention at the Southern Medical Convention for their Doctor's Day exhibit. A baby sitting course "Gems" was sponsored for 35 girls and two students enrolled for the start of the new nurses' training course at Bacone College.

The Health Careers Club now has 59 members including six boys. A county-wide meeting for the senior highschoools in this area is held each year at General Hospital. This group of youngsters won a trophy for the best and most varied educational program at the state convention.

In 1964, there are 61 members, with the state president-elect, Mrs. Richard E. Witt, from this auxiliary. The state AMA-ERF award was received because of the contribution of over \$3,000.00, with the help of the medical society to the fund. The Doctor's Day Award was also received. In addition to these honors for hours of hard work, East Central was awarded a County Achievement Award in 1964 from the National Auxiliary. □

Construction of a 100-bed general practice hospital in Tulsa got underway this month. The \$1,250,000 structure, called the Doctors Medical Center, located at 25th Street and Harvard Avenue, is designed for future expansion to 200-bed capacity. It is a privately financed project, sponsored by thirty general practitioners under the leadership of Harlan Thomas, M.D., president of the group. Other officers of the Doctors Medical Center are John D. Capehart, M.D., vice-president, Charles E. Wilbanks, M.D., secretary, and Logan A. Spann, M.D., treasurer.

Mrs. Lucille Swearingen, Bartlesville medical assistant, was re-elected as Speaker of the House of Delegates of the American Association of Medical Assistants during the national group's annual convention held in Oklahoma City October 13th-18th.

County medical societies are urged to conduct elections of 1965 officers and report them to the OSMA Executive Office by January 15th. Forms have been supplied to outgoing county society secretaries.

OSMA dues will remain unchanged for 1965. State dues are \$57.00 annually (\$5.00 is earmarked for scholarships and loans), to which must be added the annual AMA dues of \$45.00. Total: \$102.00 for 1965.

The new Medicare bill for 1965 is not expected to emerge in its final form until late February or March. President Johnson now has a task force studying the issue, and a number of innovations are being leaked out of Washington, including the possibility that a separate payroll tax will be proposed rather than using the Social Security mechanism. Congress will be organizing during the month of February, and the Administration is expected to attempt breaking Congressman Wilbur Mills' hold on the House Ways and Means Committee. Come March, the Medicare Bill of 1965 will undoubtedly be in the hopper, and organized medicine will face its most severe and perhaps its last test

on the issue of a massive federal health care scheme for the elderly.

Congressman Wilbur Mills, in a September 28th speech, said the proposed Medicare Bill which passed the Senate on September 2nd would be extremely financially unsound. The measure provided for an eventual tax rate of 5.2 per cent on both employee and employer, and a taxable wage base of \$5,600 annually. Mills reported that to keep the hospital care program from bankrupting the entire Social Security program it would be necessary for successive Congresses to raise the taxable wage base by at least \$150.00 a year. Moreover, he observed that the program would begin with a \$33 billion unfunded deficit, the amount necessary to care for persons already retired who would have contributed nothing to the scheme.

History's largest malpractice judgment has been set aside and a new trial ordered. In California, three physicians were found guilty of negligence in a case involving brain damage resulting from mistyped blood. The jury returned a verdict of \$700,000 but the judge overruled the judgment and cited misconduct of the claimants' attorney as the reason for ordering a new trial.

According to the Public Health Service, general hospitals are now significant treatment centers for mental illness. A total of 1,005 general hospitals in the U.S. admit psychiatric patients, and these hospitals reported 412,459 psychiatric discharges last year. Oklahoma reported 20 general hospitals participating in the care of mental patients, and they cared for 4,255 cases last year. Many of such general hospitals will be eligible for grant-in-aid construction funds appropriated under the Community Mental Health Centers Act of 1963, as component parts comprehensive community mental health centers.

MEETINGS

Feb. 23rd-26th—Midwinter Clinical Session, Colorado Medical Society, Hilton Hotel, Denver.

May 14th, 15th, 16th—Oklahoma State Medical Association, Tulsa Assembly Center, Tulsa.

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